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#### Foreword

Medical value travel is the term that has been chosen to refer to the practice or trend of patients seeking healthcare beyond borders. The operative word here being 'value' since a patient seeks value when they choose to undertake travel for healthcare. The term value is also of importance in this context since the practice of medical tourism adds and generates value for the country under consideration.

The medical tourism industry has witnessed a steady growth in the recent years globally. As the world population becomes more aware of healthcare options and as quality healthcare rises as a priority in the minds of the majority ages, patients are bound to pursue cross border healthcare. The primary reasons for medical tourism therefore are high quality healthcare, specialised treatment options, immediate service opportunity for travel coupled with affordability. Reasons for medical travel differ for countries. In regions where quality healthcare is unavailable, accessing healthcare may lead to medical travel, for others, cost effectiveness may be a reason.

India has emerged as one of the most sought after destination for medical tourists across the globe owing to its high value proposition in terms of quality healthcare, pool of specialists and availability of alternate treatment options such as ayurveda and yoga

Traditionally the healthcare infrastructure in India struggled to cater to the domestic needs because of the deficit in infrastructure and technical manpower.

However, with the advent of private hospitals and the evolution of the industry as a whole, even public sector facilities like AIIMS and JIPMER are equipped with world class infrastructure and capabilities to carry out the most complex surgeries. The role of the Government in this trajectory has been monumental. Government initiatives have propelled the sector and today India can boast of the capabilities in the field of robotic surgeries and other advanced medical procedures.

The growth of medical tourism in India has not only generated value for the economy but also led to the advancement of medical science, development of medical infrastructure and retention of skilled manpower.

This report aims to highlight medical tourism as a viable value proposition in India. It provides a comparative analysis of the industry in India vis-à-vis countries like Thailand, Singapore, Malaysia etc. It further enunciates the need for concerted efforts from all stakeholders in the government, industry, policy makers. The report also attempts to highlight the holistic nature of the segment and the role of multiple sectors in the proposition.

This report will be a good reference point for the discussion on medical value travel and FICCI intends for the report to be a successful thought starter in the process.



Dr. A Didar Singh
Secretary General
FICCI

#### Foreword

As healthcare struggles with the dimensions of cost, quality, and access; across the globe, developed health systems are increasingly looking to the state exchequer to save costs while managing social expectations. India looks foreward to building its own distinct proposition that can not only benefit its own populace, but also add value to its economy.

Healthcare in India, has evolved considerably over the last decade. Not only is it the fifth-largest employer among all sectors today, but it has also witnessed over a billion in private venture, and inflow of equity capital across numerous deals in the last year. Medical tourism as a segment has emerged owing to India's increasing strength in healthcare delivery. The medical tourism market is expected to expand at a CAGR of 27 per cent to reach USD3.9 billion in 2014, from USD1.9 billion in 2011. With the emergence of newer needs and with India establishing a firmer footprint as a healthcare delivery destination, medical tourism is likely to gain impetus.

One can argue on whether the country should prioritise medical tourism as a priority given the fact that India continues to score low on metrics of penetration, doctor and nurse density, number of hospital beds, and disease burden. However, it is imperative to see the proposition holistically before inferring that medical tourism in any way takes away from the country's domestic progress in terms of healthcare. Any proposition that adds value, funds, and

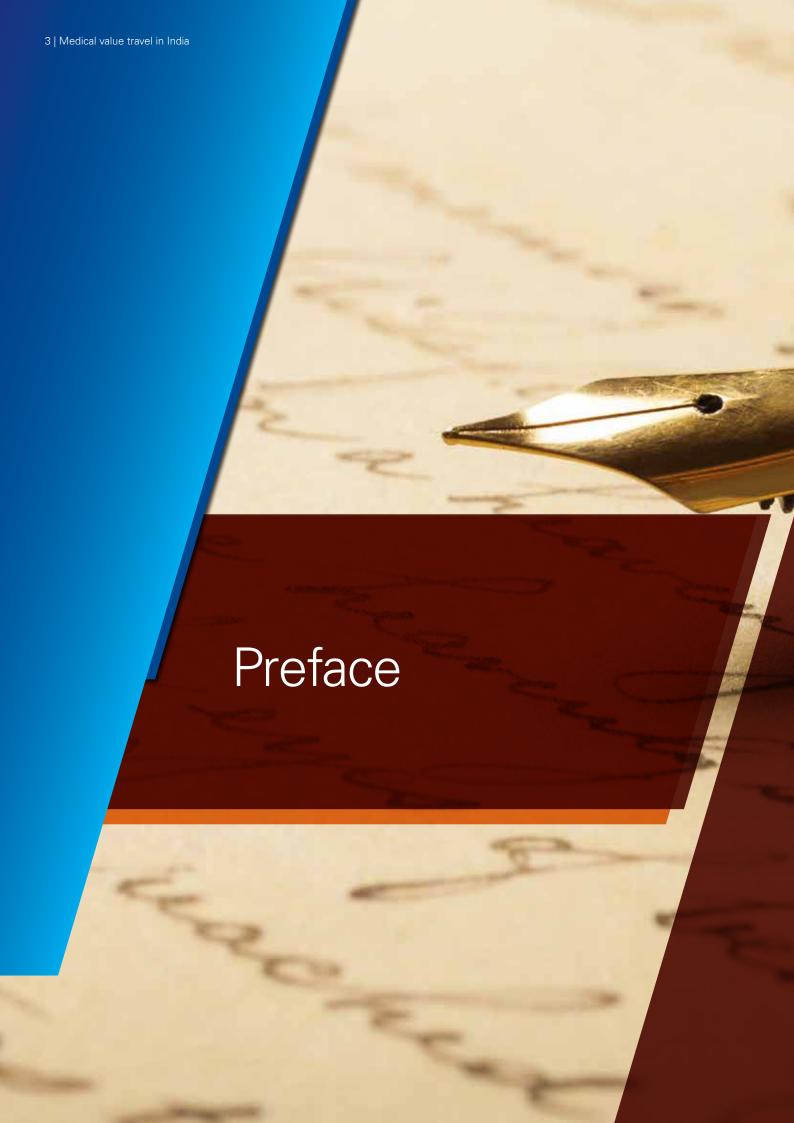
builds India's credibility and visibility globally can only lead to economic traction, a scenario that will eventually benefit the domestic industry and help propel its growth.

Another important consideration in this regard is the involvement of numerous other sectors that can help build medical travel as a proposition. Be it the hospitality sector, tourism, transport and logistics, aviation, and of course healthcare delivery. Medical tourism leverages value from these sectors, and thus help drive growth that is not just restricted to one sector in isolation.

The purpose of this report, therefore is to capture a holistic view of medical value travel as an important value proposition. We aim to assess the opportunity, India's capability in leveraging the opportunity, and finally identify the hurdles that stand in India's path as it looks to build a strong medical value travel segment. The report also provides recommendations that may play an important role in bridging these gaps; these recommendations are the result of thorough analyses and stakeholder feedback, and can go a long way in shaping the path of medical value travel in India.



Amit Mookim
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Globally Medical Value travel (MVT) is a USD 10.5 Bn industry estimated to grow to USD 32.5 Bn over the next 5 years at CAGR of 17.9 percent. The increasing numbers of ageing and uninsured population worldwide is struggling against the challenges of cost, quality and access to healthcare.

In spite of both inherent comparative and competitive advantages as a nation, India has been unable to address this market appropriately while other Asian countries such as Thailand, Singapore and Malaysia have been able to position themselves as leading providers of quality healthcare.

The Indian medical value travel industry is presently at a nascent stage, but has emerged as the fastest growing segment of tourism industry despite the global economic downturn. It is evident that most of the countries, whether USA, Turkey, Japan or smaller ones like Jordan, Croatia, Costa Rica, Malaysia are extremely organised in promoting themselves for medical travel and are further organising themselves in regions. However, in contrast, India is fragmented in its approach where individual hospitals have been promoting themselves as the hospital destinations. The medical value travel stakeholders in India need to consolidate their efforts and strategise on how to leverage the available opportunities.

In this context, FICCI has set up a Working Group on Medical Value

travel to conduct a background study and develop a framework on which a multi-stakeholder Medical Value travel Council can be created with an aim 'to position India as the most preferred healthcare destination'. The overall aim of the Council will be to promote India as the preferred medical value travel destination and facilitate the Indian Healthcare Industry to effectively position itself in the global market.

#### Specific objectives of the Council

- The Council will provide a platform for its members to forge partnerships and discuss best practices with the global medical tourism market through events and other activities.
- The Council will also be a focal point for all matters related to healthcare travel, to facilitate policy research and programmes on healthcare travel development and promotion, and serve as a one-stop centre for solutions on matters related to healthcare travel.
- The Council will stimulate public-private sector collaboration to formulate strategic plans for the development and promotion of healthcare travel services, and coordinate promotional activities for Indian healthcare providers and related stakeholders. While the healthcare travel industry will be private sector-driven, the Government needs to assume an active role to facilitate its growth.

#### Activities Proposed for the Council

- Develop and maintain database of hospitals, clinics, wellness centres, spas, Ayush companies, medical tourism companies, hotels and other stakeholders of medical value travel in India
- Promoting awareness for the need of showcasing India as the medical value travel destination within India
- Research on the policies that regulate the medical tourism industry and provide recommendations from the Industry on the legislations
- Organise Events Exhibition /
  Conference / Seminar and other
  networking events in India and abroad
  to showcase India as the medical
  value travel destination
- Connecting all the stakeholders in a retail chain to develop the complete package for medical value travel (service providers, government, agents, hotels, airlines, transfer services, tourist attractions etc)

It was decided in the working group meeting to develop a report on medical value travel to be released during FICCI HEAL scheduled on September 1 & 2, 2014. The report addresses the MVT opportunity, discuss impediments, suggest way forward in establishing India as a leading healthcare destination, feature some of the global best practices and case studies, centering on Asian countries and establish the need for formation of a multi stakeholder MVT Council.

#### **MVTWorking Group Members**

- 1. Mr Abhay Soi, Chair-Working Group on Medical Value travel and CMD, Halcyon
- 2. Dr. Narottam Puri, Chairman, NABH & Advisor- Medical, Fortis Healthcare
- 3. Dr. Navneet Kumar, Dhamija Dy. Commissioner (Trg.) & Nodal Officer Telemedicine Ministry of Health & Family Welfare, Gol
- 4. Ms Archana Pandey, Director External Affairs, Max India
- 5. Representative from Ministry of External Affairs, Gol
- 6. Representative from Dept of AYUSH, MoHFW, Gol
- 7. Mr. Benny Charles Daniel, Manager Marketing, Manipal Hospital
- 8. Mr. Saghir Siddiqui, Head Marketing, Manipal Hospital
- 9. Mr. Ravi Bhandari, CEO, Shalby Hospital
- 10. Mr. Rajiv Sharma, CEO Sterling Hospital
- 11. Dr. V N Shah, Head, Zydus Hospitals and Healthcare Research
- 12. Mr Raj Raina, Head International Marketing, Apollo Hospitals
- 13. Mr Vinay Kaul, VP-Sales & Marketing, Columbia Asia Hospitals
- 14. Mr Navneet Malhotra, Vice-President & Head-International Marketing Medanta Medicity
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- 17. Mr. Vinay Shankar Mathur, Deputy Secretary General, FICCI
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- 19. Mr. Rahul Chakravarty, Director, FICCI
- 20. Mr. Praveen Mittal, Joint Director, FICCI

#### **About FICCI**

Federation of Indian Chambers of Commerce and Industry (FICCI)

Established in 1927, FICCI is the largest and oldest apex business organisation in India. Its history is closely interwoven with India's struggle for independence and its subsequent emergence as one of the most rapidly growing economies globally. FICCI plays a leading role in policy debates that are at the forefront of social, economic and political change. Through its 400 professionals, FICCI is active in 38 sectors of the economy. FICCI's stand on policy issues is sought out by think tanks, governments and academia. Its publications are widely read for their in-depth research and policy prescriptions. FICCI has joint business councils with 79 countries around the world.

A non-government, not-for-profit organisation, FICCI is the voice of India's business and industry. FICCI has direct membership from the private as well as public sectors, including SMEs and MNCs, and an indirect membership of over 83,000 companies from regional chambers of commerce.

FICCI works closely with the government on policy issues, enhancing efficiency, competitiveness and expanding business opportunities for industry through a range of specialised services and global linkages. It also provides a platform for sector specific consensus building and networking. Partnerships with countries across the world carry forward our initiatives in inclusive development, which encompass health, education, livelihood, governance, skill development, etc. FICCI serves as the first port of call for Indian industry and the international business community.

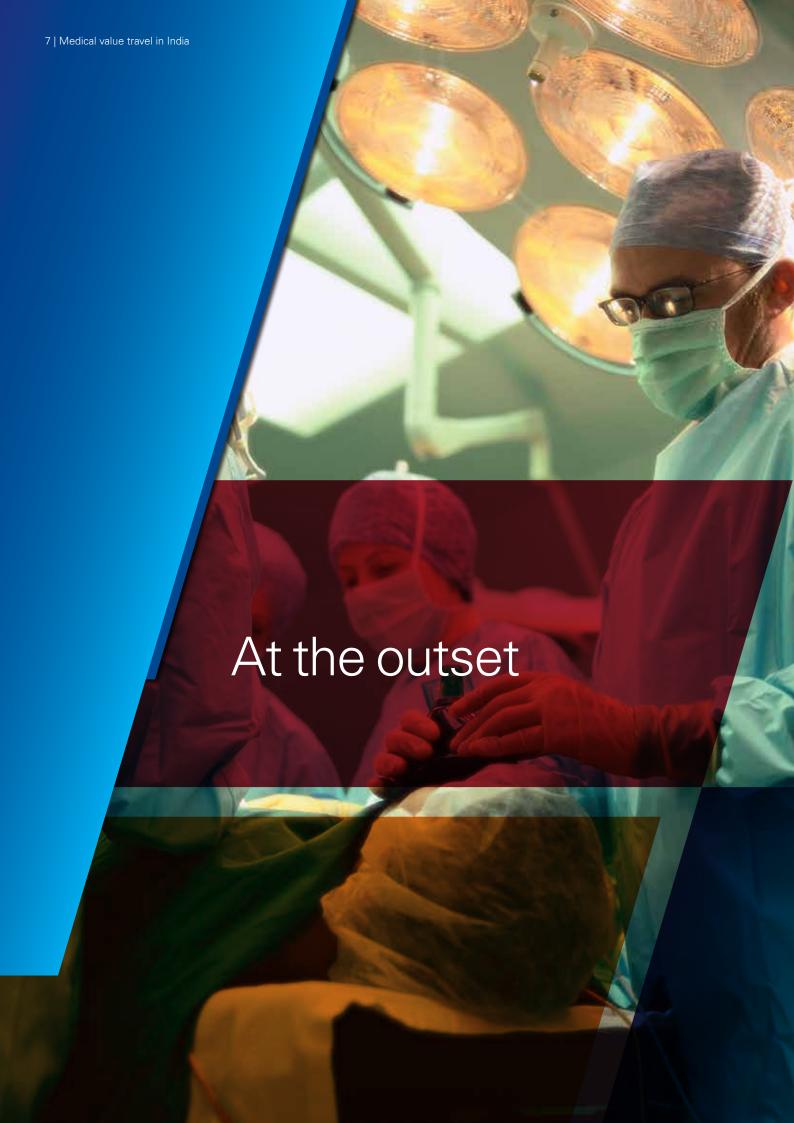
#### FICCI Health ServicesTeam

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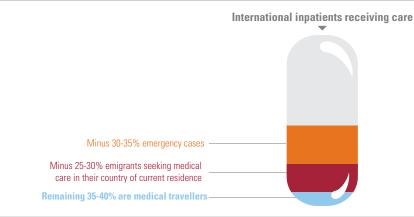
Medical value travel or medical tourism is loosely defined as a segment, making estimation of market size a challenge

Since there is no agreed definition of medical tourists, the methods applied by each country to estimate their number vary significantly. While some countries count foreign patients' visits to hospitals, others count the entry of individual patients into the country. Some countries record nationality and not the place of residence of the patient. This can result in ambiguity in the count of medical tourists, for e.g. when migrants return to their home country for medical treatment.

In a nutshell, medical tourists are defined as people from various countries who travel across international borders to receive some form of medical aide or treatment.

According to industry estimates, around seven million patients are said to be travelling each year to receive medical care.¹ Due to the highly fragmented nature of the industry and different definitions, there are

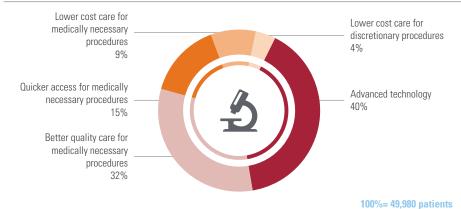
various estimates of the market size. The global medical tourism industry was estimated at USD10.5 billion in 2012. It is expected to grow at a CAGR of 17.9 per cent from 2013-19 to reach USD32.5 billion in 2019.<sup>2</sup>



Medical tourism or travel for health comprises of two different segments. One segment comprises of people who travel to other countries for rejuvenation purposes, and the other segment comprises of people who travel for curative care that is not available in

their countries. While the former is a luxury segment, the latter is economy. Majority of the market that travels for curative care is extremely price sensitive and hence it plays an important role in deciding their destination for medical assistance.<sup>3</sup>

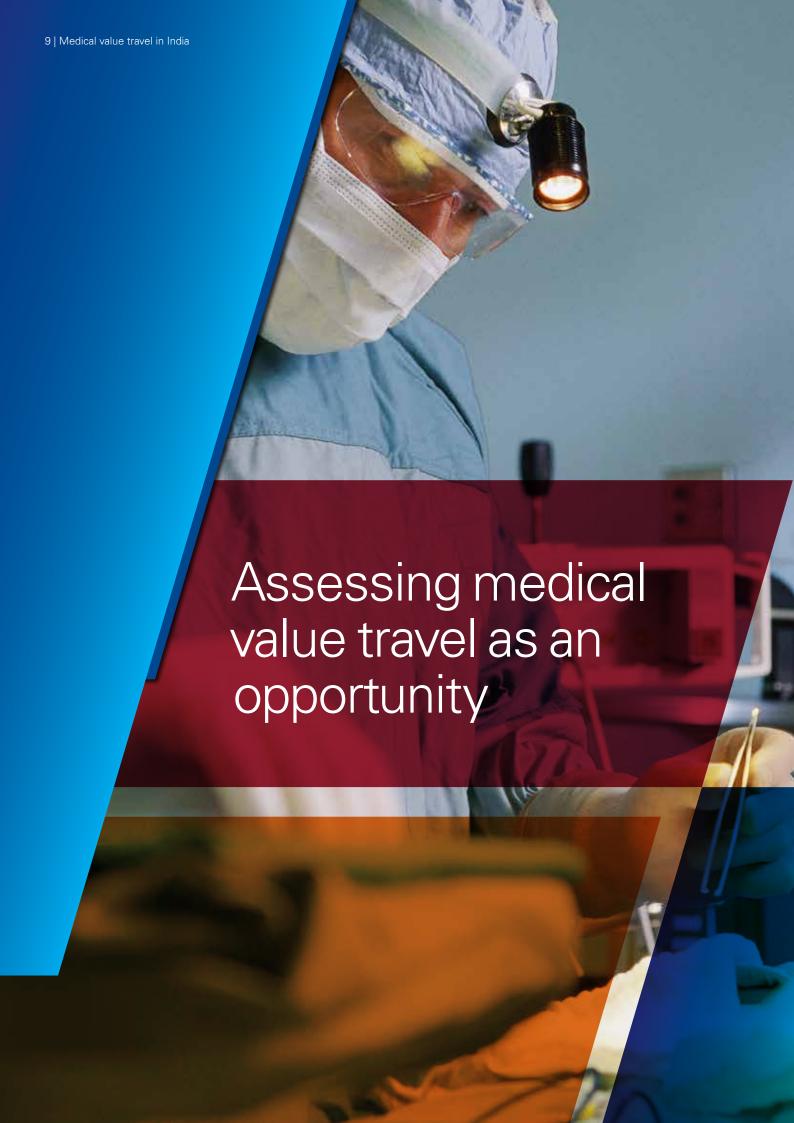
#### Relative size of medical traveller segments



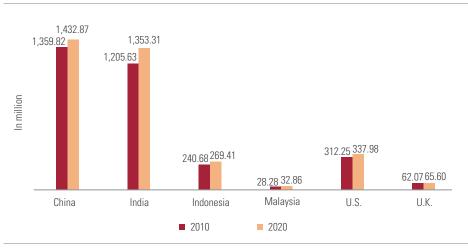
 <sup>&#</sup>x27;International medical tourism industry pegged at USD 40 billion a year', Economic Times, 27 June 2013

<sup>&#</sup>x27;Medical tourism hamstrung by obsolete visa rules', Business Standard, 2 December 2013

<sup>3.</sup> KPMG in India analysis, 2014



#### Increasing population leading to increasing healthcare burden



Source: United Nations, Department of Economic and Social Affairs, World population prospects: The 2012 revision, accessed July 2014.

The global demand for healthcare services is on a rise, driven by demographic factors such as increased longevity and rising birth rates.<sup>4</sup>

The life expectancy rates in not just developed, but developing nations of the world have seen a considerable improvement. According to OECD estimates, by 2050, the percentage of those aged 80 and above will more than double from 4 per cent in 2010, to nearly 10 per cent. At the same time, there is growing awareness among people about diseases, and therapies available, increasing the demand for good quality healthcare services. People are now willing to travel that extra mile to receive treatments at affordable prices.

#### Changing disease patterns posing fresh challenges

The global population is plagued with increasing incidences of chronic diseases. According to 2012 data<sup>5</sup>, noncommunicable diseases accounted for two-thirds of death, across the world (an increase of 60 per cent from 2000). It has been observed that in the past decade, major killers globally included ischemic heart disease, stroke, lower respiratory infections, and chronic obstructive lung disease. Lung cancer (along with trachea and bronchus cancers) caused 1.6 million (2.9 per

cent) deaths in 2012, in comparison to 1.2 million deaths in 2000. At the same time, diabetes led to 1.5 million (2.7 per cent) deaths in 2012, an increase from 1 million deaths in 2000.<sup>6</sup>

Higher stress levels in the growing population, changing lifestyle of the working population, and unhealthy eating habits are resulting in higher incidence of lifestyle-related ailments like obesity, diabetes, etc.

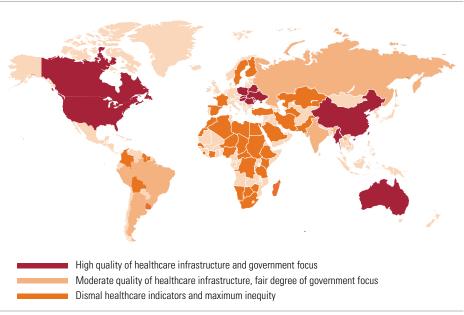


<sup>4.</sup> KPMG in India analysis, 2014

 <sup>&#</sup>x27;Changing patterns of cardiovascular diseases and cancer mortality in Portugal, 1980–2010', Biomedcentral, 29 December 2012

<sup>&#</sup>x27;The 10 leading causes of death in the world, 2000 and 2012', WHO,

#### Unavailability of quality healthcare in many countries across the world creates the need to look beyond borders

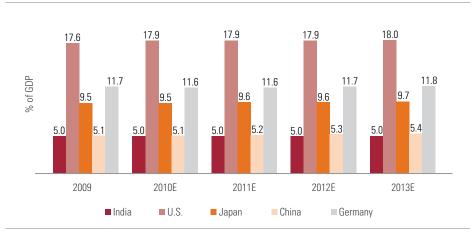


Source: KPMG in India analysis, 2014

Sophistication in healthcare services is not uniform across the globe. Countries where healthcare spending is limited (by the government) and where the private sector has not evolved as much may not have the infrastructure and capability to meet the healthcare needs of their population.

There is often considerable disparity in the socio-economic conditions of the population many a times leading to situations where despite the ability to pay, patients may not be able to access quality healthcare, simply due to the lack of availability. Many African countries, South American countries, and even the Middle East nations fall under this category.

#### International comparison of healthcare spending

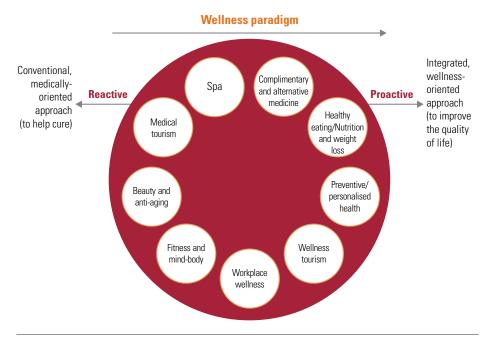


On one hand, we have a country such as U.S. that leaps ahead of many economies in terms of healthcare spending and advancement in healthcare infrastructure. On the other hand, there are many countries in Africa, South America, Middle East, etc. that have pockets of population which are compelled to resort to other destinations for healthcare needs due to lack of availability.

across the globe

The wellness industry should be perceived as a continuum. It comprises of a 'reactive approach to treatment' which includes treating diseases and ailments, and a 'proactive approach' which includes things that enhance quality of life, improve health,

and bring a person to increasingly optimum levels of well-being. A wellness centre essentially emphasises the importance of holistic well being by treating oneself on a mental and physical level regardless of a medical condition.<sup>7</sup>



Source: KPMG in India analysis, 2014

The last decade has seen considerable number of changes in terms of attitude, behaviour, and economic status globally. Increase in education and awareness levels of the population has led to people becoming more health conscious. At the same time, rise in

disposable income has increased the spending capacity enabling people to spend more on their health and well-being. In a nutshell, the world is witnessing a positive shift towards wellness tourism.<sup>8</sup>



The global wellness tourism industry, with a growth rate of 9 per cent per annum, is said to be growing at a 50 per cent faster rate than other tourism sectors<sup>9</sup>

There is an inclination seen towards focussed tours that can help benefit the health of travellers directly or indirectly. Improvement of physical or mental health is increasingly becoming the purposeful agenda of people travelling to other countries. In each trip undertaken, they try to fulfil their

wellness objective. In other words, individuals are looking to add more value to their physical and mental health along with some travel, fun, and leisure.

<sup>7.</sup> KPMG in India analysis, 2014

<sup>8.</sup> KPMG in India analysis, 2014

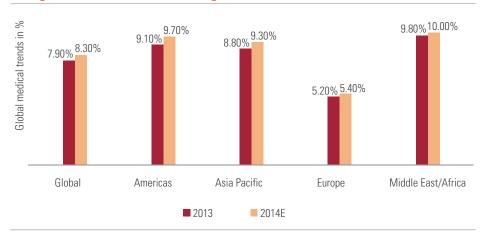
<sup>9. &#</sup>x27;Wellness Travel Outstrips Global Tourism Growth', Travel Market Report, 14 October 2013

#### Rising medical trend rates across regions

Rollback of public benefits in the global healthcare industry and the consequent pressure build-up on the companies in the sector in recent times had led to the emergence of the medical inflation era. <sup>10</sup> There seems to be sizeable increase in the cost of healthcare as many healthcare companies are facing cost constraints. High rates of chronic diseases and worsening lifestyle habits

are also contributing to the rising costs of healthcare. It has been reported that the gross global average medical trend, which stood at 7.9 per cent, is expected to rise to around 8.3 per cent in 2014.<sup>11</sup> Although the medical inflation rate seems to be stabilising now, in some countries, it is even higher than the general economic inflation rate.

#### Rising medical trend rates across regions

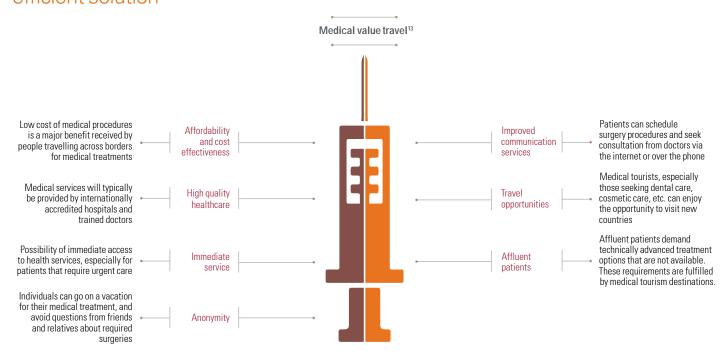


Source: Analyst report

#### Global trends for medical inflation<sup>12</sup>



#### These factors have made way for medical value travel as an attractive and efficient solution



#### Need to promote medical tourism

In developed countries, medical tourism often provides an alternate way for uninsured or underinsured patients to obtain economical treatment. It can help bring down the waiting period significantly and help provide treatment to patients who require urgent medical care. Growth of medical tourism is likely to promote the expansion and modernisation of health facilities in developing countries. Medical tourists can access specific procedures like complex surgeries, specialised treatments for chronic diseases, and other methods of focussed care. There are surgeries and procedures that are not covered under the insurance ambit, for instance, cosmetic surgeries and dental treatments. Medical tourism offers a viable option in such cases too. With growing concerns of rising medical costs, aging population, increase in lifestyle related diseases, coupled with factors such as increasing healthcare awareness among people, medical tourism can help reduce the burden of disease considerably and help people receive the timely and appropriate care they need.



<sup>10.</sup> Actuary analysis, accessed July 2014

<sup>11.</sup> Actuary analysis, accessed July 2014

<sup>12.</sup> Actuary analysis, accessed July 2014

<sup>13.</sup> KPMG in India analysis, 2014

#### In summation..

- Rising healthcare costs, demographic factors, and rising demand for cosmetic
  and dental surgery (procedures not covered under the insurance ambit in
  developed countries), together with the availability of quality and cost effective
  healthcare services in developing countries are main factors driving medical
  tourism globally
- The substantial inequity in healthcare availability globally, has led to a situation where people may have to seek treatment options in other countries due to the lack of advanced treatment options domestically
- While the demand for medical tourism is fuelled by quality and cost considerations relative to domestic treatment options, the choice of destination is incumbent on numerous factors, including credibility of the destination, proximity, and the variety of available healthcare services
- Increasing healthcare awareness has changed the mindset of many travellers
  who now look at healthcare holistically, rather than from a curative perspective;
  this has led to wellness tourism, where travellers opt for some form of
  rejuvenation or wellness exercise during their travels
- With countries now treating medical tourism as a truly value adding proposition, not only to their economy but also to patients who travel in or out of the country to avail healthcare/wellness options, medical value travel is becoming an important consideration in the healthcare landscape of many emerging economies.



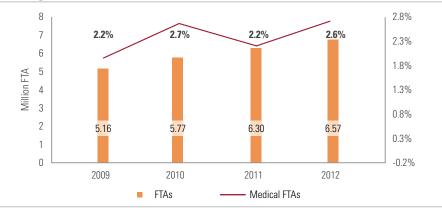
In summary, the addressable market for medical value travel is significantly large; the question to consider is whether India has the capability to leverage this opportunity efficiently.





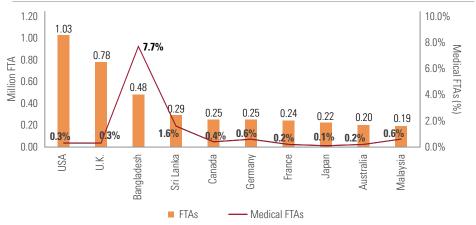
India receives medical tourists from across the globe, however developing and underdeveloped countries form a major portion of the pie<sup>14</sup>

#### Total Foreign Tourist Arrivals (FTA) vs FTAs for medical treatment in India



Source: 'India tourism statistics 2012', Ministry of Tourism website, accessed 25 July 2014

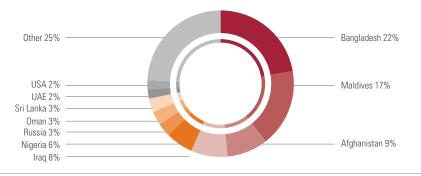
#### Top 10 source countries of FTAs in India, 2012



Source: 'India tourism statistics 2012', Ministry of Tourism website, accessed 25 July 2014

In 2012, US and UK were responsible for the highest number of FTAs in India. However, the number of FTAs for medical treatment from these two countries was significantly less, at 3.4 percent  $^{15}$  of the total medical FTAs. Bangladesh and other neighbouring underdeveloped countries on the other hand were responsible for approximately 50 percent<sup>16</sup> of the total number of medical tourists

#### Nationality wise break-up of FTAs for medical treatment purpose in India, 2012



Source: 'Indian Healthcare Services', J.P. Morgan Asia Pacific Equity Research, 12 March 14 \*Note: Country wise share adds up to 99%

Bangladesh accounts for the highest number of medical tourists owing to the lack of quality healthcare infrastructure and unavailability of skilled manpower in their country. Moreover, India is a convenient option because of its physical proximity and similarity in culture, food and language. 17

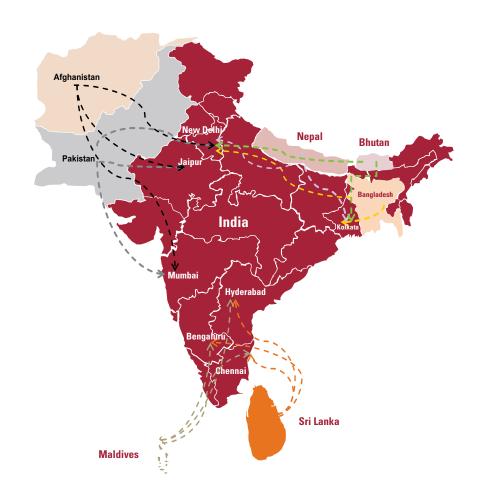
<sup>&#</sup>x27;India tourism statistics 2012'. Ministry of Tourism, November 2013, p51.

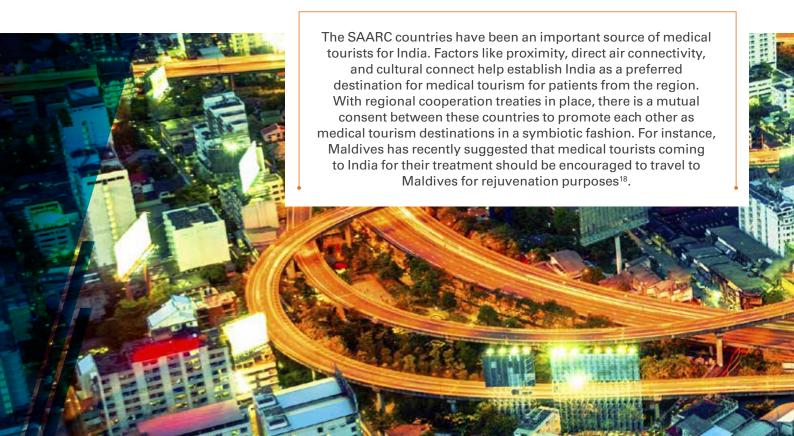
<sup>&#</sup>x27;India tourism statistics 2012', Ministry of Tourism, November 2013, p52.

KPMG in India analysis, 2014

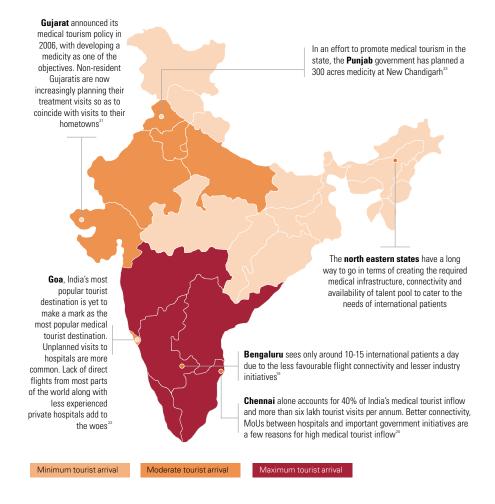
<sup>&#</sup>x27;India tourism statistics 2012', Ministry of Tourism, November 2013, p53.

<sup>\*</sup>Note: The data used for the analysis above has been \*Note: Ine data used nor the analysis above has been taken from the Ministry of Tourism, that strictly includes only those tourists who visit the country for medical treatment. However, a large percentage of medical tourists come to India for alternative treatme options such as yoga and ayurveda. The number of medical value travellers in India is quoted very high hose paid in the before a decrease the the by some industry bodies and does not match the vernment data





Some of the prominent medical hubs in the country are Chennai, Bengaluru and New Delhi; concentration of better facilities in the south is an observable trend



- 18. 'Swaraj says will showcase India's strength', build ties with all countries', NetIndian, 28 May 2014
- 'City scores low on medical tourism'. The Indian Express, 19 May 2013
- 20. 'City scores low on medical tourism', The Indian Express, 19 May 2013
- 'Medical tourism picking up in S Gujarat', Times of India, 13 September 2013
- 22. 'Medical tourism: Goa fails to make the cut', The Goan, 19 April 2014
- 'Punjab to promote Medical tourism in big way: Sukhbir', Business Standard, 14 November 2013
- 24. KPMG in India analysis, 2014



Key parameters which are necessary to enable and promote medical value travel in India have been identified and assessed<sup>25</sup>

Parameter	Definition	Metrics
Amenable legal framework	A legal framework refers to the policies that the host country has in place in order to encourage medical tourism; a less restrictive policy is better for international patients seeking medical care	Ease in facilitation of visas     Lucidity in the regulatory process     Stakeholder feedback
Cost effectiveness	This is one of the primary drivers behind people crossing borders for medical care. Healthcare providers need to develop innovative solutions in order to sustain lower cost models	Cost per surgery     Stakeholder feedback
Quality of healthcare	A major factor behind patients repeatedly visiting a particular country for its services, especially in areas that require advanced medical care and life saving surgeries	Availability of skilled doctors/specialists     Availability of nurses     Accreditation     Stakeholder feedback
Hospitality	Hospitality includes accommodation options, language similarity, cultural adaptability, and logistics. Other basic infrastructure such as road connectivity and airport can also enhance the medical tourist experience	Logistics' support     Accommodation     Cultural adaptability     Mumber of international airports
Healthcare infrastructure	Infrastructure would include medical infrastructure in terms of hospitals, number of doctors, modern treatment options, etc.	Number of hospitals     Number of doctors     Modern treatment options
Beyond allopathy	Availability of alternative treatment options such as ayurveda, yoga and unani, etc.	Number of alternative treatment centres     Stakeholder feedback
Government initiatives	The government needs to take appropriate measures in order to promote medical tourism at international platforms and support the industry through investments and liaisons with other countries. It includes online campaigns and other promotion initiatives for the medical tourism industry	Number of campaigns/promotions done by government     Stakeholder feedback
Macroeconomic factors	Factors that impact medical travel such as political stability, terrorism, pollution, sanitation standards, quality of drinking water, etc.	1. Global benchmarking indicators

The legal framework for medical health travel in India is evolving, but requires considerable revamping

#### Medical tourism visa guidelines

Medical visas (M-visa) are generally issued by the Indian government to every medical tourist, for a period of one year. The one year validity of an M-visa can be extended by an additional 12 months in some special cases. Medical cases with heart problems, organ transplants, ophthalmic disorders, and neuro-surgery are given priority.<sup>26</sup>

Earlier patients were allowed to visit only three times in a year during this extended time-frame, with a mandatory two-month gap between two entries. However, recent changes in the regulation have now lifted this two-month gap restriction, except for seven countries including China, Pakistan, and Bangladesh. The centre has also allowed granting free medical visas for Maldivian nationals for a period of 90 days.<sup>27</sup>

Industry experts point out that the visa application process is highly cumbersome as the patients are asked to report to the Indian embassy personally and furnish bank statements/ medical reports, and are even referred to the embassy doctor for a second opinion.<sup>28</sup> There is no special provision given to tourists who come to India to avail wellness facilities.

The existence of multiple ministries in decision and policy making fuels inefficiencies and makes the process of decision making long-drawn and tedious.

Regulates hea	Ilthcare related
facilities and	practices

Regulates trade related activities in the country

Policy making around relationships with other economies

Representing the Indian proposition overseas

Policy making around tourism in the country

Ministry of Health and Family Welfare

Ministry of Commerce

Ministry of Oversea

Ministry of External Affairs

Ministry of Tourism

# Austrand t Minis this f

#### Surrogacy in India

Since the legalisation of commercial surrogacy in 2002, India has been a popular destination for intended parents from countries like Australia, U.S., Israel, and Europe owing to the low surrogacy costs and the prevalence of well-established fertility clinics. However, the Ministry of External Affairs, in 2012, imposed greater restrictions in this field through the introduction of new visa regulations. Issue of medical visas (and not general visas) has now become mandatory for all foreigners visiting India for commissioning surrogacy. A letter from the embassy stating that the country recognises surrogacy and the child born thereof will be treated as a biological child of the couple is also required. The treatment can be done only at registered ART clinics recognised by the ICMR.<sup>29</sup>

 <sup>&#</sup>x27;Medical VISA to India', MediConnect India, http://www. medicalindiatourism.com/medical-visa-india/, accessed July 2014

<sup>27. &#</sup>x27;India allows free, 90-day medical visas for Maldivian nationals', Travel Biz Monitor, 24 January 2014

 <sup>&#</sup>x27;Medical tourism hamstrung by obsolete visa rules', Business Standard, 2 December 2013

<sup>29. &#</sup>x27;India - New medical visa laws to regulate surrogacy', Jordan Publishing, 17 April 2013

#### India has an edge over the other peer countries in terms of cost effectiveness

A key competitive advantage India has in medical tourism, in comparison to other countries, lies in the cost effectiveness it has to offer to its patients. A person coming to India for his/her medical treatment can have savings anywhere in the range of 30 to 70 per cent. Even

if we consider the ticket expenses and accommodation expenses along with the treatment cost, the overall expenditure would be lower than the treatment cost in the U.K. or the U.S. or many other countries.<sup>30</sup>

Procedure cost (US\$)	U.S.	Thailand	Singapore	Malaysia	U.A.E.	South Korea	Mexico	Costa Rica	India
Heart bypass	1,30,000	11,000	18,500	9,000	40,900	31,700	27,000	24,100	7,000
Heart valve replacement	1,60,000	10,000	12,500	9,000	50,600	42,000	30,000	30,000	9,500
Hip replacement	43,000	12,000	12,000	10,000	46,000	10,600	13,900	11,400	7,020
Knee replacement	40,000	10,000	13,000	8,000	40,200	11,800	14,900	10,700	9,200

Source: 'Indian Healthcare Services', J.P. Morgan, 12 March 2014, p2; 'Medical Tourism in India: Progress, Opportunities and Challenges', Madras School of Economics, Monograph 26/2013, March 2013, p21.

Moreover, fluctuations in exchange rates also have an impact on the value proposition of medical value travel. As a result, a sharp depreciation of the Indian rupee has proven to be a boon for medical travellers coming to India

since they are able to buy more medical facilities at affordable prices.31 According to estimates, the fall of the rupee against the dollar gave medical tourists a cost advantage of around 35 to 40 per cent.32



<sup>30.</sup> KPMG in India analysis, 2014

<sup>31. &#</sup>x27;Rupee fall brings more medical tourists', Times of India, 22 August 2013

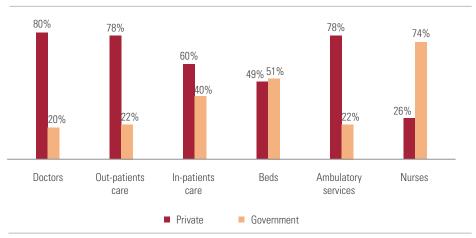
<sup>32.</sup> KPMG in India analysis, 2014

#### Emergence of a robust private sector has considerably enhanced the quality of healthcare

The private sector has been largely responsible for improvement in the Indian healthcare services. Many of the private hospitals are accredited with the National Accreditation Board for Hospitals & Healthcare Providers

(NABH) and Joint Commission International (JCI). Currently there are 21<sup>33</sup> JCI accredited healthcare facilities in India, which are reflective of the high international quality standards being adopted in the country.

#### Share of private vs. government in healthcare, 2012



Source: 'India's Healthcare System - Overview and quality improvements', Swedish agency for growth policy analysis, 20 May 2013,

Moreover, private hospitals are taking various initiatives such as structuring teams and processes, adopting corporate governance, and carrying out internal audits and separate governance for clinical quality to improve and maintain quality standards.

Many Indian hospitals now have modern technologies/treatments available with well equipped ICUs, cardiac surgery treatments, cath labs, organ transplant, advanced imaging technologies such as MRI and PET, prenatal diagnosis,

neonatal screening, bone marrow transplant, and in vitro fertilisation options.

Post independence, the number of registered medical practitioners has increased 17 times<sup>34</sup> to reach 8,52,195<sup>35</sup> in March 2012, and Indian medical colleges are reputed to produce quality medical professionals. The standard of medical services at large corporate hospitals has positioned India on the global map as a preferred destination for high end medical care.

33.	'JCI-Accredited Organisations', Joint
	Commission International website, http://
	www.jointcommissioninternational.org/
	about-jci/jci-accredited-organisations/?c=India,
	accessed 5 August 2014

- 34. 'Doctor population ratio for India -The reality', Indian Journal of Medical Research, April 13,
- 35. Medical Council of India 2011-12 annual report.
- 36. KPMG in India analysis, 2014
- 37. U Anand Kumar, 'India has just one doctor for every 1,700 people', The New Indian Express 22 September 2013.

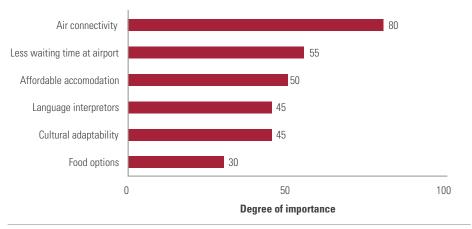


Hospital	Advanced treatment options <sup>36</sup>
Apollo group	Sugar clinics for diabetes
Fortis group	Cardiac surgeries: minimal invasive cardiac and beating heart surgery, and awake bypass surgery
Medanta	Robotic surgeries, advanced cardiothoracic & vascular surgeries, and liver transplant
Manipal hospital	Robotic surgeries, knee replacement, bone marrow treatment

According to stakeholder feedback, air connectivity is one of the most important parameters that help patients make a decision in choosing a destination for medical travel.

Less waiting time at the airport is also a factor that patients consider for comfort. Indian international airports are relatively slow in immigration clearance as compared to other countries; this is especially true in Tier two cities.<sup>38</sup>

#### What do medical travellers look for apart from healthcare



Source: Primary interviews

India needs to work on increasing efficiency at the immigration in order to make the travelling experience hassle free for patients. Special treatment or queues for medical visa holders may also help in this case. Moreover, better infrastructure in terms of highways and roads would add to the overall satisfaction of medical tourists.

Affordable hotels and hospitals can join forces to create an environment of holistic care for medical tourists. In India, many leading hospital chains have collaborations with hotels, but the trend remains restricted to only a few cities. For instance, in 2006, Apollo hospitals and Taj Group<sup>39</sup> entered into an alliance, that can be replicated by hospital chains to help make accommodation arrangements easy for medical tourists. Such an alliance benefits both the hospital as well as the hotel chain, ultimately benefiting medical tourists.

Availability of language interpreters is also an important parameter for better communication between doctors and patients, along with overall satisfaction of medical tourists. Many leading hospitals provide language interpreter services to their patients. India is witnessing growing number of medical tourists from countries such as Africa and the Middle East, and ease in communication goes a long way in enhancing the comfort of patients.

Cultural adaptability is another important factor. It has been observed that medical tourists from SAARC nations are more comfortable in India as compared to western countries. Availability of food as per the patient's requirement is another consideration. Many hospital chains provide different cuisines to its international patients.

<sup>38.</sup> KPMG in India analysis, 2014

Prabodh Chandrasekhar, 'Taj, Apollo to tie up for medical tourism', Business Standard, 10 February 2006

The past decade has been an eventful one for the Indian healthcare sector. Estimated at USD78.6 billion as of 2012, the sector has emerged as the one of the largest sectors in India and is poised to grow at a CAGR of 15 percent to reach approximately USD158.2 billion by 2017.40 From what was primarily a loosely knit social sector in the early '90s healthcare has emerged a large

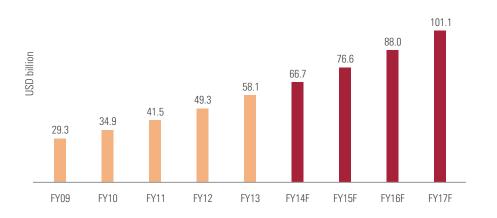
sector with dynamic private sector activity. The sector has received over a billion dollars of investment by way of private venture and equity capital, and boasts of one of the largest eye-care chain in the world.

Traditional healthcare models have evolved in the last decade and India has seen growth in terms of hospital market as well as medical devices market.

#### **Key players:**

Apollo Hospitals, Fortis Healthcare, Manipal Health Systems, Narayana Health, Medanta Medicity, Lilavati Hospital, Jaslok Hospital, Bombay Hospital, Hinduja Hospital, Wockhardt Hospital, Max Hospitals

#### Hospital industry market size in India



Source: D&B report: Hospital sector, August 2013

The domestic manufacturing companies can now be seen transitioning from producing devices in the low technology segment to the medium technology segment. They are increasingly expanding operations and making efficient use of technology to produce cost efficient and high quality medical devices.<sup>41</sup>

#### **Key players:**

Philips, Siemens, Opto Circuits, GE, Hindustan Syringes & Medical Devices, Medtronic, J&J, Covidien, Boston Scientific, Varian, Toshiba, Becton Dickinson

#### Medical devices industry market size in India (INR billion)



Source: Netscribes, Medical devices market – India, April 2013

Growth and development of the indigenous industry reflects India's expanding capacity to furnish the healthcare needs of foreign patients.

 <sup>&#</sup>x27;India's healthcare sector to grow to \$ 158.2 billion in 2017: Study', Economic Times, 1 December 2013

<sup>41.</sup> KPMG in India analysis, 2014

India is witnessing a surge in emerging formats of healthcare delivery models. These new healthcare delivery models are light asset ventures which score high on scalability and are easily replicable. Moreover, they address

the diversified needs of patients while focussing on accessibility and affordability. Diagnostic chains, single specialty clinics, etc. are some of the examples.

#### Emerging and expanding alternate healthcare models in India

	Basic		Specialised
<u>.≧</u>		Healthcare needs	
Remote At facility Point of care	<ul> <li>Primary care 2.0</li> <li>Emergency and Trauma care</li> <li>Diagnostic chains 2.0</li> </ul>	<ul> <li>Cancer care centres</li> <li>Renal care centres</li> <li>Day care surgery</li> <li>Diabetes clinics</li> </ul>	Wellness centres     Invitro fertility centres     Cosmetic clinics     Geriatric care     Home care     Tele diagnostics and telemedicine

Source: KPMG in India analysis, 2014



Our traditional strength in ayurveda and yoga add a distinct angle to the medical tourism value proposition

India offers a diverse basket of medical services and rejuvenation facilities to patients at reasonable prices. Medical tourists travel to India to make the most of India's ancient tradition of ayurveda and its low-cost medical tourism facilities. Some of the different forms of medical tourism offered in the country include yoga, meditation, ayurveda, allopathy, naturopathy, unani, etc. There is also a dedicated department of Ayurveda, Yoga & Naturopathy, Unani,

Siddha and Homoeopathy (AYUSH) in India to focus on the development of education and research in ayurveda, yoga & naturopathy, unani, siddha and homoeopathy systems in India. People are increasingly realising the importance of such alternative forms of treatment that focus on naturally curing ailments, and the body's capability to heal and maintain itself.42

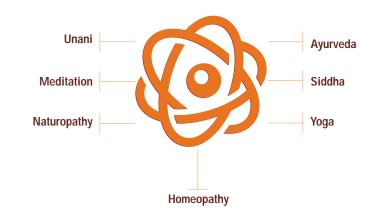
#### Famous yoga and meditation centers in India:

The Vivekananda Kendra, Morarji Desai National Institute of Yoga, Ayurveda Retreat Hospital Pvt. Ltd., Brahma Kumaris, Vipassana Meditation centers etc.

#### Famous ayurveda centres/ resorts in India45

Devaaya-The Ayurveda and Nature Cure Centre, Somatheeram Ayurveda Resort, Ananda in the Himalayas, Kairali Ayurvedic Health Village, The Leela, Udaipur, etc.

#### **Beyond allopathy**





Ayurveda: One of the earliest forms of medicine, ayurveda has been a part of Indian lives for more than 5,000 years now. Ayurveda has been successful in treating various types of chronic diseases like asthma, diabetes, cardiac hypertension, de-addictions, spine and joint care, etc. Ayurveda is known to have significantly effective therapeutic values, and no proven side-effects. Another added advantage is that it is cheaper than other forms of medicine.

According to data estimates, there are around 4,50,000 registered ayurveda practitioners in the country. 43 Additionally, there are around 250 ayurvedic colleges/institutes in India, more than 8,500 licensed ayurveda pharmacies, and approximately 7,000 manufacturers,44 reflective of the importance given to this form of alternative medicine in the country.

<sup>42.</sup> KPMG in India analysis, 2014

<sup>43.</sup> Association of Ayurvedic Physicians of India, http:// aapiindia.org/, accessed August 2014

<sup>44. &#</sup>x27;Ayurveda emerging as alternative medical treatment: Rajkeswar Purryag, Mauritius President', Economic Times, 20 February 2014

<sup>45. &#</sup>x27;India's 5 leading Ayurveda destinations', Times of India, 20 January 2014

While there are a few government initiatives to encourage growth of medical value travel in the country, much remains

The government of India has taken up few initiatives for the promotion and augmentation of the medical tourism industry in the country:

- · Benefits under the market development assistance scheme:
  - Medical tourism service providers (including representatives of hospitals accredited by JCI and NABH, and medical tourism facilitators i.e. travel agents/tour operators), who are approved by the Ministry of Tourism, receive fiscal support under the Market Development Assistance Scheme (MDA)46
- Separate category of visa: In order to attract a large quantum of medical tourists, the government has introduced a separate category of medical visa: M-visa.47 This visa can be extended for additional 12 months beyond the one year issue period. A no-hindrance-clearance has been provided for medical tourists at the airports

- Improving the quality of services: For the accreditation of hospitals, the Ministry of Health and Family Welfare has set up a National Accreditation
- Board for Hospitals, under the Ministry of Commerce
- Tourism circuits: The new government's manifesto includes plans to build 50 tourism circuits, along with a medical circuit connecting hubs of modern medicine and ayurveda.48

#### For more details on state wise and industry initiatives, refer to appendix.

However, in terms of government initiatives provided to the medical tourism industry in India, there is a long way to go. The stakeholder feedback reflects that some of the expectations from the government which remain unanswered are:

- Promoting India as a medical tourism destination at an international level via digital media
- Establishing MoUs with different countries to help build relationships and enable patient movement between those countries
- Endorsing partnerships with providers/competition from other countries to facilitate medical travel
- Encouraging PPPs to build the required infrastructure to help establish India as an attractive medical tourist destination.

<sup>46.</sup> Ministry of Tourism, http://www.tourism.gov.in/ TourismDivision/AboutContent.aspx?Name=Tourism%20 Infrastructure %20Development&CID=18&INO=13, accessed August 2014

<sup>47.</sup> Overseas Indian Facilitation Centre, http://www.oifc.in/ tourism, accessed August 2014

<sup>&#</sup>x27;India medical tourism industry to reach \$6 billion by 2018: report', Live Mint, 24 July 2014

India's holistic appeal as a destination of travel is impacted by its low ranking in global indices such as Global Corruption Index, Global Peace Index. and Environmental Performance Index

The attractiveness of a country as a tourism destination can be determined by a number of factors such as safety/ peacefulness, corruption, infrastructure, terrorism, political turmoil, and the climate of the country.

Index	India	China	USA	Thailand	Malaysia	Indonesia	Singapore
CPI 2013 rank (0: very clean to 100: highly corrupt)	94	80	19	102	53	114	5
GPI 2014 rank (1: most peaceful to 162: least peaceful)	143	108	101	126	33	54	25
EPI rank (1: good quality to 178 most polluted)	174	176	38	145	55	112	15
GTI 2011 rank (1: highest impact of terrorism to 116: no impact of terrorism)	4	23	41	8	91	29	116
HDI rank 2013 (1: highest rank to 187: lowest rank)	135	91	5	89	62	108	9

Source: Indicus Database, 2011 - 2012

The global Corruption Perception Index<sup>49</sup> (CPI) ranks a country based on the perception of corruption in public sector. India ranks high in CPI indicating administrative and political corruption. Global Peace Index<sup>50</sup> (GPI) ranks a country based on the ongoing domestic and international conflict, societal safety and security, and militarisation. The reasons attributed to high ranking in GPI include the maoist movement, corruption, terrorism, regional conflicts, and sporadic conflicts with its neighbours. Another index, Environmental performance index<sup>51</sup> (EPI) ranks countries based on the air quality, household air quality, and

air pollution, India ranks high on this index. The Global Terrorism Index<sup>52</sup> (GTI) systematically ranks and compares 158 countries according to the impact of terrorism. India's low rank indicates high impact of terrorism. Human Development Index<sup>53</sup> (HDI) is a measure derived from life expectancy, education levels, and income. India ranks high in HDI indicating a high rate of child and maternal mortality, poor healthcare facility, and a large population below poverty line. All these poor ranks do affect a country's image and create a perception that can negatively impact medical tourism industry.

<sup>49.</sup> Corruption Perception Index 13', Transparency International, 26 November 2013, p3.

<sup>50.</sup> George Arnett, 'Global peace index 14: every country ranked', The Guardian, 18 June 14

<sup>&#</sup>x27;Issue Ranking Air Quality' Environmental Performance Index Yale University website, http://epi.yale.edu/epi/issue-ranking/air-quality, Accessed 25 July 14

<sup>52. &#</sup>x27;Global Terrorism Index - Capturing the Impact of Terrorism for the Last Decade', The Institute of Economics and Peace, March 12, p4.

<sup>53. &#</sup>x27;Download 2014 Human Development Statistical Tables', United Nations Development Programme website, http:// hdr.undp.org/en/data, accessed 5 Aug 14

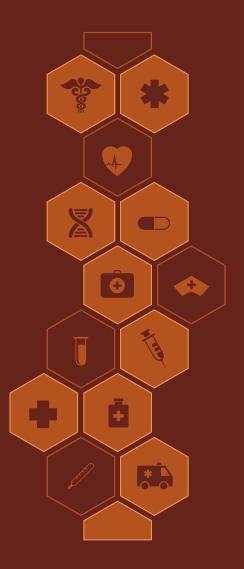
### While India scores well in terms of cost efficiency, there are a few gaps to bridge

Parameter	Assessment	Gaps	Assessment
Amenable legal framework	The government needs to ease the medical visa policy and relax/ streamline surrogacy norms to promote medical tourism.	Complicated visa regulations for medical tourists and stringent surrogacy laws	
Cost effectiveness	Treatment cost in India is very low as compared to U.S. and other developed nations. However, a structured promotion programme is imperative to increase visibility.	The message of 'cost effectiveness' needs to be adequately promoted tomedical tourists	
Quality of healthcare	India can provide advanced medical care and complicated surgeries but the number of specialist doctors is relatively low in the country.	Limited number of specialist doctors	
Hospitality	English speaking medical staff help in assisting many tourists. Logistics for medical patients in terms of accommodation and airport services need upgradation.	Lack of affordable accommodation that meets quality standards and poor logistics infrastructure	
Healthcare infrastructure	The healthcare infrastructure is improving over the years with increasing government focus and private sector participation.	Limited number of good quality hospitals and doctors	
Beyond allopathy	India has a strong value proposition in complementary and alternative medicine. Ayurveda and yoga are popular among medical tourists.	Inadequate promotion of existing alternative treatments	
Government initiatives	The government has taken a few initiatives to promote medical tourism, however much remains to be done. Moreover, there is no single point of governance to promote, streamline, and govern medical tourism.	Scant government initiatives especially in the areas of digital campaigning, international promotion. Absence of a single government agency	
Macroeconomic factors	India ranks low in global indices such as Global Corruption Index, Global Peace Index and Environmental Performance Index .	Current macroeconomic environment in the country can be difficult for medical tourists	
Significant develop	oment Moderate development	Limited development	

Source: KPMG in India analysis

#### In summation...

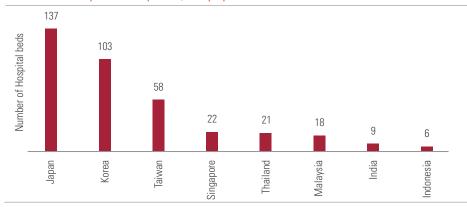
- Tapping into the medical tourism opportunity is a strategic objective for several organised Indian private healthcare providers and many Indian private healthcare facilities have already acquired international quality accreditations like JCI and JCAHO (Joint Commission of Accreditation of Hospital Organisations) to attract tourists
- Growth in the segment is driven by India's value proposition which is the right combination of quality and cost efficiency. Indian hospitals provide treatment in the fields of cardiology, orthopaedics, and even cosmetology at costs which are almost a tenth of the cost for the same procedures in developed countries<sup>54</sup>
- The presence of private hospitals with international standards and skilled medical professionals has helped strengthen India's position in medical tourism
- The formalities involved in travel to India, while fairly convenient for a few countries, can be further facilitated for countries which form a major portion of the FTA pies
- The infrastructure in India with respect to roads in cities, sanitation, and urban infrastructure may be responsible for souring tourist experiences, and there is a need to improve these facilities at least in the popular medical hubs of the country
- Yoga, meditation, ayurveda, and other traditional methods of treatment are major service offerings that attract tourists from European nations and the Middle East to India. These services form a part of the wellness continuum and are gaining traction as competitors scale up their capacity and launch focussed digital campaigns





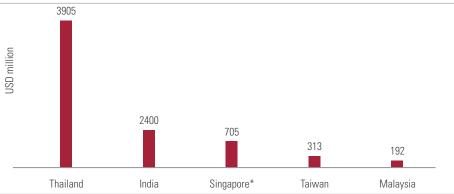
## Thailand, India, and Singapore are ranked as the top medical tourism destinations in Asia

#### Number of hospital beds per 10,000 population



Macquaire Equity research, 'ASEAN Healthcare, Nurses and Medical Tourism', 18 February 2014, via Thompson Research, accessed 25 August 2014; 'Hospital Beds (Per 10,000 Population)', Kaiser Family Foundation website, http://kff.org/global-indicator/hospital-beds/, accessed 25 July 2014

#### Medical tourism market comparison, 2012



Source: KPMG in India analysis, 2014;'A 90-Day Visa Granted to Foreigners from Six Countries Seeking Medical Services in Thailand,' The government public relation department website, http://thailand.prd.go.th/view\_news.php?id=6651&a=2, accessed 5 August 2013; 'Healthcare Industry in India', India Brand Equity Foundation, August 2013, p17; 'Asia Medical Tourism Industry Outlook to 2015; 'Mindpower solutions, 23 January 2012, p90; 'Mas stresses FEPZ role in FTA deals', TaiwanToday, 30 December 2013; 'The First Medical Tourism Concierge And Lounge In Malaysia: Seamless Service For Medical Tourists', Tourist development corporation of Malaysia website, http://corporate.tourism.gov.my/mediacentre.asp?page=news\_from\_trade&subpage=archive&news\_id=131, accessed 8 August 2014

Asia has been perceived as a favourable destination for aesthetic surgeries since a long time. In the past few years, it has taken the lead as one of the most preferred destination for medical value travel. Primary growth levers in this regard include low priced treatment options, availability of variety of treatments, improved infrastructure in terms of healthcare facilities, and attractive locations for spending time after treatment.

Many of the healthcare facilities in Asia are internationally accredited and have created a brand for themselves to attract medical tourists from both developed and developing nations. Various Asian countries have earned a reputation in advanced and life saving healthcare such as spinal implants, neurosurgical and cardiovascular treatments, joint replacement surgeries, and eye

treatment. Availability of alternative treatment options such as yoga, ayurveda, herbal medicines, Thai massage, medical spa, siddha, and unani also give Asia an edge over other countries55.

Within Asia, Thailand, Singapore, and India are the three countries that receive maximum medical tourists owing to low cost of treatment, quality healthcare infrastructure, and availability of highly skilled doctors. These three countries together accounted for approximately 60 per cent of the total Asian revenue in 2012.56

Malaysia is one of the upcoming medical value travel destinations in Asia. The Malaysian government has taken several initiatives to promote medical tourism in the country. Taiwan is another upcoming medical tourist destination in Asia that is currently targeting high income Chinese medical travellers.

- 55. KPMG in India analysis, 2012
- 56. 'Medical tourism market to reach D32.5 bn globally in 2019: Report' Biospectrum Asia website, http:// www.biospectrumasia.com/ biospectrum/news/197399/medicaltourism-market-reach-usd325-bn globally-2019-report, 3 October 2013

Note: Currency conversion rate from Oanda THB1 = USD0.0321, RM1 = USD0.322, NTD1= USD0.33, average rate from 1 January 2012 to 31 December 2012

<sup>\*</sup>Note: Estimated values for Singapore

The Asian medical tourism market is highly competitive owing to advanced medical specialities, attractive pricing, and beautiful locales

Asian countries have introduced various marketing strategies to attract medical tourists. For instance, while Thailand positions itself as a dual purpose destination for both medical and economic holiday with an attractive location, Singapore promotes itself as a destination for fine quality in medical treatment.

India is known for its cost effective medical treatments along with high standards. It is further known for its alternative treatment options such as yoga and ayurveda. Malaysia is also a cost effective destination for medical care along with its tourist attractions.

#### Comparison of major medical tourism destinations in Asia

Country	Number of medical tourists (2012)	JCI accredited healthcare facilities <sup>57</sup>	Average saving % as compared to the U.S.	Popular treatment options
Thailand	25,30,000 <sup>58</sup>	37	50 to 75	Alternative medicine, cosmetic surgery, dental care, gender realignment, heart surgery, obesity surgery, oncology, and orthopaedics
India	1,70,000 <sup>59</sup>	21	65 to 90	Cardiology, orthopaedics, nephrology, oncology, and neuro surgery
Malaysia	6,71,000 <sup>60</sup>	13	65 to 80	Cardiology, oncology, orthopaedic, obstetrics, and gynaecology
Singapore *Note: Estimated values for Singapore	4,94,000 <sup>61</sup>	21	30 to 45	Cardiology, ophthalmology, oncology, and anti-ageing
Indonesia	NA	17	NA	Cosmetic surgery, and dentistry procedures
Taiwan	1,73,311 <sup>62</sup>	13	40 to 55	Orthopaedics, fertility treatment, cardiology, and cosmetic surgery

<sup>57. &#</sup>x27;JCI-Accredited Organisations', Joint Commission International website, http://www. jointcommissioninternational.org/about-jci/jci-accreditedorganisations/, accessed 5 August 2014

<sup>58. &#</sup>x27;Thailand starts the 90-days visa exemption for GCC nationals going for medical purpose', Thai embassy website, http://www.thaiembassy.org/abudhabi/ contents/files/services-20130203-181534-057363.pdf. 3 February 2013

<sup>59. &#</sup>x27;India tourism statistics 2012', Ministry of Tourism, November 2013, p5.

<sup>60. &#</sup>x27;2.3 mil Indonesian tourists visited Malaysia last year', The Malaysian Insider, 22 June 2013

<sup>61. &#</sup>x27;Asia Medical Tourism Industry Outlook to 2015', Mindpower solutions, 23 January 2012, p90.

<sup>62. &#</sup>x27;Taiwan Medical Travel', Taiwan External Trade Development Council, 14 January 2014, p4.

## Medical value travel attractiveness matrix

Parameter	India	Thailand	Singapore	Malaysia	Taiwan	Indonesia
Amenable legal framework						
Cost effectiveness						
Quality of healthcare						
Hospitality						
Healthcare infrastructure						
Beyond allopathy						
Government initiatives						
Macroeconomic factors						

Source: KPMG in India analysis

Strong position

Moderately attractive proposition

Significant improvement needed

The above results have been derived after thorough analysis on each country using the weighted average model, the details for which are provided in the appendix. Each parameter has been analysed with respect to India and the

weights have been assigned based on input from the stakeholder feedback and secondary research. Detailed calculations have been provided in the appendix.

#### In summation...

The medical tourism landscape in Asia is continually evolving as price no longer remains the only important consideration; focus has now shifted to diversity in offerings, niche offerings, and even customised luxury.

Thailand, Singapore, and India have established themselves as credible medical tourism destinations, globally. The competition is stiff with each economy building its value proposition by further enhancing its USP.

With the governments realising the true potential of the segment, there has been a concerted effort to promote and endorse the industry at all viable platforms.

Other countries in Asia are also fast emerging as popular medical tourist destinations; Philippines, Taiwan, Korea, etc.





segment in the country



# Single consultative platform representative of all the ministries involved in medical tourism to aid endorsement and facilitation of medical tourism at a national level

- The presence of multiple bodies at the policy making level can lead to the creation of divided agendas with a diluted focus on promoting India as a preferred medical tourism destination.
- Creation of a Single Consultative Platform (SCP) with a unified agenda of promoting medical travel can help ensure effective trouble shooting and efficient policy making:
  - The SCP can be co-led by the Secretary of Tourism and the Secretary of Health and Family Welfare
  - Such an SCP can have representation from several concerned ministries such as Tourism, Health and Family Welfare, External Affairs, Home Affairs, Overseas Indian Affairs, Civil Aviation, Water and Sanitation, Department of AYUSH and the Department of Commerce
  - States where medical tourism potential is high can be represented by their health and tourism secretaries
  - Stakeholders from the private sector can also represent their issues and
- This nodal body could fall under the ambit or governance of the PMO, and should be given the authority to take collective decisions on behalf of all the ministries.
- This nodal body can also be facilitated by an Industry chamber like FICCI on behalf of the government, which has already taken a lead in bringing together concern stakeholders on one platform and initiated discussion in this respect.

#### Case study

#### Malaysia Healthcare Travel Council (MHTC)63

- Established in 2009 under the Ministry of Health, Malaysia, MHTC aims to promote Malaysia as a distinctive medical travel destination with quality healthcare services.
- MHTC focusses on facilitating public-private sector collaboration to address
  the issues faced by the medical tourism industry in Malaysia, so as to attract
  medical travellers to the country.
- The Association of Private Hospitals of Malaysia (APHM), Malaysia External Trade Development Corporation (MATRADE), Malaysian Investment Development Authority (MIDA), Tourism Malaysia, and Malaysian Dental Association collaborate at MHTC to work on strategies and programmes aimed at bringing Malaysian medical tourism into the limelight.
- It provides support to the Malaysian government by coordinating promotional activities for local healthcare providers and its stakeholders.
- It serves as the 'a holistic centre' for healthcare travel related matters.

Airports are the first point of contact that a tourist makes with Indian soil, ease in accessing facilities at airports will help enhance the patient experience

#### Upgrade the facilitation services at airports in terms of providing comfort to holders of medical visas in accelerating information availability

- Setting up a medical tourism centre/help desk at airports and providing international patients a complete docket with details on hotel bookings, bus/cab bookings, restaurants/places to visit around the hospital, etc. can go a long way in easing the stay of the patients and visitors.
- Availability of a responsible and efficient local contact person on arrival, well versed in the patient's local language, can be imperative in making medical travellers feel more secure. Healthcare providers can authorise such personnel.
- Hospitals should inquire about the patient's food preferences and any other specifications before their arrival, so as to make necessary arrangements and avoid any inconvenience to the travellers

#### Case study

#### Bumrungrad Hospital, Bangkok<sup>64</sup>

- Founded in 1980, Bangkok's Bumrungrad International Hospital is recognised as one of the largest private hospitals in Southeast Asia
- The hospital is world renowned as one of the most popular and preferred destinations for medical tourism. Out of the million patients the hospital treats annually, more than 520,000 are foreign nationals
- The hospital's medical coordination office, comprising of a dedicated team of around 30 doctors, nurses, and interpreters, helps serve the special needs of every international patient they receive. The team helps establish communication and collaboration between the patient's primary (local) doctor and the Bumrungrad's medical team continues even after the patient returns home
- The hospital's website, available in different languages, provides valuable assistance to patients in planning their visit to the hospital, ranging from booking the doctor's appointment to airport pickup, and accommodation
- Patients can even get in touch with the hospital's local referral office located in 16 different countries including Australia, Bangladesh, UAE, and China
- A wide range of in-hospital accommodations from lowpriced four-bed rooms to royal suites are also offered by the hospital.
- The Bumrungrad Hospitality Residence, a 56 room serviced apartment, is connected by an air-conditioned elevated walkway to the hospital, permitting trouble-free access to patients and visitors.
- A 51 room, serviced apartment complex, called Bumrungrad Hospitality Suites is also managed by the hospital for inbound patients and their families. The patients can rent this accommodation for a day, a week, or even a month.

# Alliances amongst private players (different industries e.g. aviation/hospitality, and healthcare) to help improve patient experience from a comfort and ease of journey perspective

- When an international patient comes to India for his treatment, he is faced with challenges like choosing a suitable accommodation near the hospital, logistics, etc.
- Collaboration between private players from different industries, for e.g. alliances between a hospitality provider, airline company, and hospital could go a long way in helping ease the travel experience for a patient.

#### **Case study**

#### Apollo-Emirates alliance<sup>65</sup>

- In order to connect international patients seeking healthcare treatments in India, Apollo Hospitals has recently joined hands with Emirates airlines.
- Consequently, the patients along with their relatives from 19 countries across
  the Middle East and Africa can now travel to India to visit Apollo's flagship
  locations in Chennai, Hyderabad, New Delhi, Kolkata, Ahmadabad, and
  Bengaluru at specially devised fares for round-trip flights on Emirates.
- As a part of the tie-up, Apollo hospital's clientele from India can save up to 6 per cent on return business class and up to 4 per cent on return economy class bookings across the Emirates network in India. 10 per cent saving on business class and up to 5 per cent on economy class bookings from selected points of origin to India is also provided to travellers.

The role of the government in establishing relationships and facilitating tourist inflow cannot be understated

#### Government alliances such as MoUs to increase the number of medical tourists (role of Ministry of Overseas Indian Affairs(MOIA))

- Entering into formal engagements/partnerships with other governments could enable exchange of not just innovative ideas, leading industry practices,, skilled manpower, (doctors, nurses, etc.) and technology, but also robust medical tourism. With a formal government arrangement in place, people will likely be more aware and secure about travelling to India to receive quality medical treatments at lower prices
- MOIA can help set up medical tourism hubs in different countries and facilitate the promotion and propagation of India as a medical tourism destination. These hubs could help spearhead focussed initiatives based on the epidemiological need of the population to drive medical tourism in the country. These hubs could also serve as information exchange centres for the people residing in the guest country
- MOIA can also play an important role in building 'Brand India' as a preferred destination for medical tourism via marketing campaigns, road shows, and networking meets.

#### Case study

Arrangements like the six recent India-Japan MoUs in different sectors to boost bilateral ties should be extended to the medical tourism industry<sup>66</sup>

- In order to promote tourism between the two countries, an MoU has been signed between the Japan Tourism Agency, the Ministry of Land, Infrastructure, Transport and Tourism, and the Ministry of Tourism, India.
- · An agreement was signed between the Ministry of Education, Culture, Sports, Science and Technology of Japan and the Department of Science and Technology, and the Ministry of Science and Technology of India for implementing bilateral science and technology exchanges.
- In an effort to harmonise standards between the two countries, the Bureau of Indian Standards and Japanese Industrial Standards Committee have also signed an MoU.
- An MoU, aimed at enhancing energy efficiency in telecom towers, has been signed between the New Energy and Industrial Technology Development Organisation (NEDO) of Japan and the Department of Economic Affairs, Ministry of Communication and Information Technology, and the Ministry of New and Renewable Energy.
- Notes have been exchanged between the two countries in reference to the Official Development Assistance (ODA) loan for Uttarakhand Forest Resource Management Project, and the Japanese ODA is financing it.

India needs to invest heavily in improving basic infrastructure such as roads and airport facilities in the medical hubs to compete with other Asian counterparts

# Building on basic infrastructure such as roads and airport facilities in the medical hubs of the country (as priority) and emerging medical hubs (to help ensure a favourable travel experience for the tourists)

- It is advisable to improve basic infrastructure at airports by providing special needs assistance, ramps, user-friendly lifts, special toilets, wheelchairs, strollers, and capabilities to handle medical emergencies.
- Airport service at the immigration section should be streamlined to help reduce the time spent by patients for clearances.
- There is a need to upgrade the quality of road infrastructure to help ease the movement of medical tourists (especially routes to key hospitals)
  - Medical tourism hubs such as Chennai, Bengaluru, Mumbai, and Delhi/NCR should be treated on priority in this regard
  - In subsequent phases, emerging medical tourism hubs such as Ahmedabad, and Goa can be considered.
- Sanitation standards also need to be improved especially around the hospitals treating medical tourists.

#### **Case study**

#### Singapore's infrastructure is ranked amongst best in the world

- Singapore has an efficient public transportation network of taxis, buses and mass rapid transit rail system. The land transport authority of Singapore is using big data analytics<sup>67</sup> to further enhance transportation management. The country has integrated public transport hubs that connect bus interchanges, and railway stations. Singapore has adopted a number of technological solutions such as computerised traffic light signalling system, intelligent transport system and expressway monitoring, and advisory system<sup>68</sup> to manage traffic efficiently.
- It has developed an airport that is among the best, with a handling capacity of 70 million<sup>69</sup> passengers anually. The airport provides facilities such as convenience stores, hotel reservation counters, medical services, and pay per use lounge facility. It also has ashower facility, foot reflexology, massage therapy, and a gym for rejuvenation.

 <sup>&#</sup>x27;Singapore Government uses Big Data analytics to optimise transport management', FutoreGov Magazine, 17 April 2014

 <sup>&#</sup>x27;General Overview', Singapore Ministry of Transport website, http://app.mot.gov.sg/Land\_Transport/General\_ Overview.aspx, accessed 5 August 2014

<sup>69. &#</sup>x27;Singapore to Double Changi Airport Capacity as Demand Increases', Bloomberg, 9 January 2014

There is an urgent need of a nationally authenticated government website to serve as a one-stop information window for prospective medical tourists

# Nationally authenticated/recognised website with information on hospitals, treatment options, and doctor credentials to help potential medical tourists make informed decisions

- The government can help by providing details such as:
  - List of accredited hospitals
  - Treatment options available
  - Credentials of doctors
  - Approximate cost of treatment
  - List of integrated centres and health spas.
- The website can also highlight certain recent advancements in medical technology that are available in the country.
- Telephonic helpline service with language interpreter support can be provided on the website to address queries from major medical tourist source countries.
   Help desks at major airports and designated institutions with language interpreter support can also help in attracting medical tourists.
- Medical treatment packages can also be promoted on this website.
- Digital marketing campaigns via such a website can go a long way in endorsing the medical tourism proposition in the country.

While such a website has been proposed, the process should be expedited

#### **Case study**

#### Website for medical travellers from Tourism Authority of Thailand (TAT)

- TAT launched a website in 2010 to promote medical tourism. The website <sup>70</sup> provides information about the country's hospitals, clinics, spas, and Thai traditional medicine practitioners. The Tourism authority of Thailand uses this website to showcase the achievements of hospitals in medical procedures.
- TAT actively promotes medical tourism in the country through various campaigns. In 2010<sup>71</sup>, it launched an e-marketing campaign to promote Thailand as a global centre of excellence for medical tourism. The activities included: a blogging contest, sales promotion offering exclusive rates to tourists, and campaign to promote credibility, and safety of medical services. In 2014, TAT launched a digital marketing campaign<sup>72</sup> called 'Thailand extreme makeover' to promote medical tourism. Under this campaign, tourists around the globe are invited to participate in a 'reality-type contest' where winning contestants are offered makeovers. Thailand majorly attracts medical tourists looking for cosmetic surgery procedures, and this campaign will help the country to further strengthen its position in this area.

Welcome to ThailandMedTourism.com', Tourism authority of Thailand website, http://www.thailandmedtourism.com/ Home/28, accessed 1 August 2014

 <sup>&#</sup>x27;TAT launches E-Marketing Campaign for Medical Tourism in Thailand', eTurboNews, 21 October 2010

<sup>72. &#</sup>x27;THAILAND: New medical tourism campaign launched', International Medical Travel Journal, 3 April 2014

The role of facilitators needs to be defined and regularised by the government to promote transparency in the Indian medical tourism industry

# Help eliminate/minimise the role of middlemen/facilitators in channelising medical tourists toward the country to make the treatment more cost effective for tourists

- The facilitation of medical tourism in India is disorganised and middlemen/ facilitators play an important role in the value chain. This creates a scope for corruption which could lead to inflated costs that are eventually borne by the patient.
- There is a need to streamline this process and help curtail the unethical practice of unreasonable monitory commissions demanded by such facilitators.
- The government can provide guidelines and help regularise the role of middlemen/facilitators in channelising medical tourists toward the country to make the treatment more cost effective for tourists. One way of achieving some transparency may be via nodal bodies at the state level recognised/ authenticated by the government. These bodies can serve as an authentic go-to system for potential medical tourists.
- Central government can also promote and help regulate facilitators cadre. The registered facilitators can support medical tourists.
- This can also enhance transparency of the system and promote India as a credible destination for healthcare delivery.

#### **Case study**

## Hospitals have established centres in foreign countries to facilitate medical tourism

- Various hospital chains have centres outside India, such as in the Middle
  Eastern countries, where it receives a large number of medical tourists. Such
  centers can be utilised to streamline the process of medical tourism, giving
  the tourists a pleasant experience.
- It will help reduce the role of facilitators who usually ask for a huge cut for their services. Corrupt practices prevalent in this area can also be curbed if hospital centers abroad are directly in touch with their patients right from the first step.

Alliances between the private and public sector can go a long way in the overall upgradation of infrastructure in the country

# Promoting healthy PPP alliances that focus on providing quality healthcare (community participation should be enabled)

- PPP can help improve healthcare infrastructure in the country significantly, especially when it comes to upgradation and expansion of medical facilities in terms of advance treatment and diagnostic centres.
- In case of challenges that India faces, for instance in, building highways, among the best and infrastructure for improved connectivity around hospitals, PPPs can be a possible solution.
- Various PPP models can also be used to improve hotel infrastructure and to provide cost effective housing facilities for the patients and those who accompany them.

#### **Case study**

Funding high end technology therapies - proton beam therapy center through the PPP model

- In France, a proton therapy centre<sup>73</sup> was established through the PPP model where the private partner took over the responsibility of financing, building, operating, and handling the technical aspects of the centre and the government rented the beam time over the course of a contract. Siemens has also taken a PPP initiative in Germany to establish two proton therapy centres in the country.
- Proton therapy is a costly tool to treat certain type of cancers and setting up a centre for proton therapy is an expensive programme for public healthcare systems. PPP model can be a suitable solution to this problem.
- Public and private sector can together drive large technological healthcare projects in order to improve the quality of healthcare infrastructure in the country.

Digitally enabling healthcare delivery not only reduces costs but aids accessibility and enhances the overall efficiency in the care value chain

# Increasing the usage of telemedicine network for prior consultations and follow-ups

- There is a need to leverage the telemedicine network more effectively for prior consultations and follow-ups.
- With the help of telemedicine, doctors can remotely examine a patient's diagnostic reports, vital information, history, etc. to suggest the correct treatment options.
- Digitally enabling the process can lead to a more cost effective and logistically viable medical tourism network.
- The government, in 2005, approved the establishment of State Wide Area Network (SWAN) throughout the country, aimed at the creation of a state wide area network to improve government efficiency.
- Initiated in 2011, the national optical fiber network (NOFN) programme
  focussed on increasing the fiber connectivity in rural areas. Applications
  including e-health can be launched in the rural areas using this network.
  However, the extension of the completion deadline of the project from 2012
  to September 2015 indicates that India has a long way to go in the adoption of
  telemedicine.
- The use of telemedicine can also provide financial benefits to the population of a country, as is evident in a study conducted by the Department of Health in the United Kingdom. The study was conducted over 3,030 patients with one of the three chronic conditions: diabetes, heart failure, and chronic obstructive pulmonary disease. The results have shown that telemedicine can significantly reduce mortality, and thereby the need for hospital medicine, and number of bed days for hospital admission, resulting in considerable cost savings for the population.

#### **Case study**

#### Apollo Telemedicine Networking Foundation74

- Apollo Telemedicine Networking Foundation (ATNF), a not-for-profit
  organisation, is a part of the Apollo Hospitals Group. ATNF is regarded as
  one of the first organisation to set up a rural telemedicine centre in India.
- ATNF works with multiple entities such as the central and state governments, medical bodies, and private and public sectors, both at a domestic and international level, to popularise the concept of telemedicine.
- The primary objective of ATNF is to provide low cost services across the healthcare value chain to patients at remote locations, thereby helping patients circumvent issues related to accessibility and affordability.
- ATNF has a custom-made web-based software called Medintegra, which is used by the peripheral centres in the network to transmit electrocardiograms (ECGs), images (X-ray films, computed tomography [CT] scans, ultrasound pictures, MRI) and other reports.
- ATNF enjoys many advantages owing to its affiliation with the wide network of Apollo hospitals. In terms of availability of specialists and expert consults there is no paucity making the model extremely self reliant and credible.



# Lessons to learn from Asia Case study: Thailand



Thailand is a popular destination for cosmetic surgery procedures. The country has been positioning itself as a destination for economical holidays and medical treatments for a variety of ailments. Thailand realises the potential of medical tourism as a driver of revenue, and the country is targeting THB100 billion (USD3.27 billion) by 2015<sup>75</sup>.

#### AdvantageThailand

Thailand is home to internationally accredited medical facilities and its medical professionals are highly qualified. Over 500 doctors in Thai hospitals are certified by the American Board of Medical Specialties. The treatment cost in Thailand is significantly lower than that in developed countries. No waiting list and excellent hospitality services are also supporting the growth of medical tourism in the country. Further, the country offers integrative wellness centres and facilities such as Thai destination spa, medical spa, Thai massage, and other activities for relaxation and recovery.

#### Hospitals

Thailand has 37 healthcare facilities <sup>76</sup> accredited by the JCI, one of the leading of global healthcare quality and safety. Bumrungrad International is one of the leading hospitals in Thailand, which caters to about 1,000 international patients everyday with the help of over 900 physicians across 55 specialties. Piyavate International Hospital and Bangkok Dusit Medical Services are other leading hospital groups providing services to medical tourists in the country.

#### Popular treatment options

Alternative medicine, cosmetic surgery, dental care, gender realignment, heart surgery, obesity surgery, oncology, and orthopaedics are some popular treatment options among medical tourists.

#### Savings

Low cost of medical treatment is a major growth driver for the medical tourism industry in Thailand. The average cost of medical procedures in Thailand is 50 to  $75^{77}$  per cent less than that in the U.S.

#### Cost comparison of key medical procedures, USD

Treatment	Thailand	U.S.
Heart bypass	11,000	1,30,000
Heart valve replacement	10,000	1,60,000
Angioplasty	13,000	57,000
Hip replacement	12,000	43,000
Hysterectomy	4,500	20,000
Knee replacement	10,000	40,000
Spinal fusion	7,000	62,000

 <sup>&#</sup>x27;Healthy holidays: PE and medical tourism', Asian Venture Capital Journal, 20 February 2013

 <sup>&#</sup>x27;JCI-Accredited Organisations', Joint Commission International website, http://www. jointcommissioninternational.org/ about-jci/jci-accredited-organisations/, accessed 5 August 2014

<sup>77. &#</sup>x27;Indian Healthcare Services', J.P. Morgan, 12 March 2014, p2

Source: 'Indian Healthcare Services', J.P. Morgan, 12 March 2014, p2; 'Medical Tourism in India: Progress, Opportunities and Challenges', Madras School of Economics, Monograph 26/2013, March 2013, p21.

## Lessons to learn from Asia Case study: **Thailand**

#### Government initiatives78

The government has played a major role in promoting medical tourism and healthcare facilities. The government is also focussing on improving the availability of herbal products. The Tourism Authority of Thailand (TAT) has a detailed medical tourism website to highlight popular treatment options and reputed hospitals for medical tourists. The TAT promotes medical tourism through online e-marketing campaigns and organising familiarisation tours to major global news agencies for showcasing available medical and wellness treatments.

#### Outlook

Thailand has strongly positioned itself as the medical tourism hub and is expected to continue to attract foreign patients through its superior multi-specialty and superspecialty hospitals, such as Bumrungrad Hospital or Bangkok Hospital. Moreover, ancient healing traditions based on herbal medicines are also expected to continue attracting foreign tourists from around the world.

#### Recent developments

Due to recent cases of violence in the country, some medical tourists have postponed their trips until the situation improves. If the situation persists, Thailand may lose its market share to countries such as Malaysia, the Philippines, and India.

#### Number of medical tourists and estimated revenue generated

	2010	2011	2012	2013	
Total tourists	1,59,00,000	1,92,30,000	2,23,50,000	2,67,35,583	
Number of medical tourists	19,80,000	22,40,000	25,30,000	NA	
Estimated revenue (THB, million)	78,740	97,874	121,658 — 140,000	NA	
Top five medical tourists by nationality					
1	Japan	Japan	Japan	NA	
2	ASEAN	ASEAN	U.S.	NA	
3	Middle East	Middle East	U.K.	NA	
4	U.S.	U.S.	GCC	NA	
5	U.K.	U.K.	Australia	NA	

Source: Ministry of public health, Thailand and Kasikom research center

<sup>78.</sup> KPMG in Analysis

<sup>79. &#</sup>x27;Singapore Medical Tourism Growth Reaches 8% Yearly', Medical Tourism guide website, http://www. medicaltourism-guide.com/tag/ singapore/, accessed 5 August 2014

# Lessons to learn from Asia Case study: Singapore

Advanced medical infrastructure and highly trained doctors to handle complicated treatments are key differentiating factors for Singapore. Good airport connectivity and easy visa availability for medical tourists makes Singapore one among the leading players in the Asian medical tourism industry

Singapore is largely famous for complicated medical procedures such as heart surgeries. It draws medical tourists with its medical infrastructure that is among the best and English speaking medical professionals. The country has been positioning itself as a destination for modern medical technology with highly trained doctors. Singapore ranks sixth among 191 countries with advanced health systems in the world. Its medical tourism market is expected to grow at 8.3 per cent<sup>79</sup> per annum to reach USD1.71 billion in 2018.

#### Advantage Singapore

Singapore has robust medical infrastructure and a good airport to help boost medical tourism. The cost of treatment is low as compared to developed nations; easy visa facility by the government is also an advantage. Privacy, and Singapore's reputation as a safe country also attracts medical tourists to the country.

#### Hospitals

Singapore has 21 healthcare facilities<sup>80</sup> with JCI accreditation. SingHealth, Raffles medical group, Parkway health and National healthcare group are some of the major hospital chains/groups

#### Popular treatment options

Foreign visitors can select from a range of services such as dental treatment, health screening, anti-ageing treatment, orthopaedic surgery, oncology, and many others. The country generally offers high-end medical treatments. Cardiology, ophthalmology, and oncology are the leading services in which Singapore has achieved specialisation. Liver and kidney transplant procedures are also popular among medical tourists. Further, the country has a booming dental treatment market.

#### Savings

The average cost of medical procedures in Singapore is 30 to 45 per cent<sup>81</sup> lower than that in the U.S.

#### Cost comparison of key medical procedures, USD

Treatment	Singapore	U.S.
Heart bypass	18,500	1,30,000
Heart valve replacement	12,500	1,60,000
Angioplasty	13,000	57,000
Hip replacement	12,000	43,000
Hysterectomy	6,000	20,000
Knee replacement	13,000	40,000
Spinal fusion	9,000	62,000

<sup>80.</sup> Singapore Medical Tourism Growth Reaches 8% Yearly', Medical Tourism guide website, http://www. medicaltourism-guide.com/tag/singapore/, accessed 5 August 2014

<sup>81. &#</sup>x27;JCI-Accredited Organisations', Joint Commission International website, http://www. jointcommissioninternational.org/about-jci/jciaccredited-organisations/, accessed 5 August 2014

<sup>82. &#</sup>x27;Indian Healthcare Services', J.P. Morgan, 12 March 2014, p2.

Source: 'Indian Healthcare Services', J.P. Morgan, 12 March 2014, p2; 'Medical Tourism in India: Progress, Opportunities and Challenges', Madras School of Economics, Monograph 26/2013, March 2013, p21.

## Lessons to learn from Asia Case study: Singapore

#### Government initiatives

Singapore created 'SingaporeMedicine' in 2003, a government-industry partnership comprising the country's Ministry of Health, tourism board, and other stakeholders to promote medical tourism. The Singapore government is also promoting medical tourism by signing agreements with the governments of neighbouring countries such as the UAE and Bahrain. The Singapore Tourism Board (STB) works closely with private healthcare providers to strengthen their position in target markets. It partnered with VISA to offer medical concierge services to its Indonesian cardholders.

#### Outlook

Treatment costs in Singapore is more in than other competing countries such as Thailand and India. However, Singapore is likely to attract medical tourists from around the world through its advanced medical facilities. The country is expected to cross the benchmark figure of a million foreign patients by 2015.

#### Recent developments

Though the Indonesian rupiah has depreciated by 20 per cent against the Singapore dollar since May 2013, the country has not witnessed significant decline in patients from Indonesia, which is one of the largest contributors of medical tourism to Singapore.

#### Number of medical tourists and estimated revenue generated

	2010	2011	2012	2013
Total tourists	1,16,41,700	1,31,71,300	1,44,96,100	1,55,67,923
Number of medical tourists	4,45,000	4,65,000 (estimated)	4,94,000 (estimated)	NA
Estimated revenue (USD, million)	630	660	705	758
	Top five medical	tourists by national	ity	
1	Indonesia	Indonesia	Indonesia	NA
2	NA	Malaysia	NA	NA
3	NA	Bangladesh	NA	NA
4	NA	Vietnamese	NA	NA
5	NA	Myanmar	NA	NA

Source: KPMG in India analysis, 2014: Singapore tourism board, International visitor arrival statistics, June 2014: 'Asia Medical Tourism Industry Outlook to 2015', Mindpower solutions, 23 January 2012, p90

Competitive pricing, high quality care and attractive nature landscape are differentiating factors for Malaysia. The government is actively promoting Malaysia as a preferred destination for healthcare tourism.

Malaysia has steadily worked on building a strong healthcare tourism sector, and the revenue from this sector has grown tenfold in the last ten years. The industry is strongly supported by the government through several promotional activities, attractive offers, and favourable guidelines. The medical tourism industry in the country is projected to grow at a CAGR of 12.78 per cent over 2013–2017.82

#### Advantage Malaysia

Value for money services, quality care, and competitive pricing are some major advantages enjoyed by medical tourists to Malaysia. Cultural similarity is another important factor that attracts Asian medical tourists. Easy availability of halal food also attracts many Indonesian medical tourists to the country. Further, Malaysian hospitals, unlike their Thai counterparts, do not charge administration fee. Attractive natural environment and a good marketplace are also factors that make Malaysia an attractive medical destination.

#### Hospitals

Malaysia has 13<sup>83</sup> healthcare facilities with JCI accreditation. Pantai Hospitals, Gleneagles Hospitals, and Prince Court Medical Center are some major hospitals in the country.

#### Popular treatment options

Cardiology, oncology, orthopaedic, obstetrics, and gynaecology are popular medical areas sought by medical tourists in Malaysia. Other popular areas among medical tourists include urology, otolaryngology, gastroenterology, reconstructive surgery, and health screening.

#### Savings

The average costs of medical procedures in Malaysia is 65 to 80 per cent lower than that in the U.S.

#### Cost comparison of key medical procedures, USD

Treatment	Malaysia	U.S.
Heart bypass	9,000	1,30,000
Heart valve replacement	9,000	1,60,000
Angioplasty	11,000	57,000
Hip replacement	10,000	43,000
Hysterectomy	3,000	20,000
Knee replacement	8,000	40,000
Spinal fusion	6,000	62,000

Source: 'Indian Healthcare Services', J.P. Morgan, 12 March 2014, p2; 'Medical Tourism in India: Progress, Opportunities and Challenges', Madras School of Economics, Monograph 26/2013, March 2013, p21.

<sup>82. &#</sup>x27;Low Cost Treatments Driving Malaysian Medical Tourism Market', Free press release website, http:// www.free-press-release.com/news-low-costtreatments-driving-malaysian-medical-tourismmarket-1370935268.html, accessed 5 August 2014

<sup>83. &#</sup>x27;JCI-Accredited Organisations', Joint Commission International website, http://www.jointcommissioninternational.org/about-jci/jci-accredited-organisations/, accessed 5 August 2014

#### Government initiatives

In 2009, the Malaysian government established the Malaysia Healthcare Travel Council (MHTC) to develop the healthcare travel industry and promote Malaysia as a preferred destination for healthcare tourism in the region. MHTC works closely with private healthcare players and relevant government agencies to help ensure quality care and ease the entry of medical tourists into Malaysia. The government has launched the medical tourism concierge and lounge at the Kuala Lumpur International Airport to provide healthcare service information as well as information on transportation, accommodation, and travel within the country. The government also offers tax incentives to private hospitals and extended visa period to patients. Further, the government has developed a health tourism website to provide extensive information on products, prices, and places of healthcare services.

#### Outlook

The medical tourism industry is expected to witness strong growth because of increasing medical costs, growing health awareness, and availability of better information on treatment options. The government is targeting 2 million medical tourists by 2020 by undertaking several initiatives, including skill enhancement of medical facilitators, promotion of high standards in hospitals, development of medical specialties, and promotion of Malaysia as a preferred medical tourist destination in Asia. Through strong government support and cost-effective treatment options, along with scenic vacation spots, Malaysia is expected to continue to host an increasing number of medical tourists.

#### Recent developments

The MHTC plans to undertake promotional activities in the U.K. to attract more medical tourists, as it has witnessed a high growth rate in medical tourists from U.K.

#### Number of medical tourists and estimated revenue generated

	2010	2011	2012	2013
Total tourists	2,45,80,000	2,47,10,000	2,50,30,000	2,57,20,000
Number of medical tourists	3,92,000	5,83,296	6,71,000	7,70,134
Estimated revenue (RM, million)	379	511	594	688 (estimated)
	Top five medical	tourists by national	ity	
1	Indonesia	Indonesia	Indonesia	NA
2	India	India	India	NA
3	Japan	Japan	Japan	NA
4	U.K.	U.K.	China	NA
5	China and Hong Kong	China and Hong Kong	U.K.	NA

Source: KPMG in India analysis, 2014; Mindpower solutions, 23 January 2012, p100; 'Overall healthcare travelers 2007-2013', Malaysia Healthcare Tourism Council website, http://www.mhtc.org.my/en/index.aspx, accessed 5 August 2014

### Lessons to learn from Asia Case study: Taiwan

Technology and select healthcare services are two key differentiating factors for Taiwan. Owing to its linguistic and cultural similarities with China, it is attracting a high number of medical tourists from China.

Taiwan is a small player in the medical tourism industry due to its relatively late entry into this domain. However, its government is keen on promoting medical tourism in the country. It was initially known for affordable and advanced cosmetic surgery procedures, but it has now strengthened orthopaedics, fertility treatment, and cardiology departments too.

#### AdvantageTaiwan

Taiwan's major strength lies in technology and select healthcare services. Highly skilled doctors, advanced hospitals, and affordability are some major advantages enjoyed by medical tourists. Linguistic and cultural similarities, along with geographical proximity with China, has boosted the influx of medical tourists from China. Regular health check ups involving the use of cutting edge medical equipments is popular among Chinese medical tourists.

#### Hospitals

Taiwan has 13<sup>84</sup> healthcare facilities with JCl accreditation. Chang Bing Show Chwan Memorial Hospital, Chin-Gung Memorial Hospital, Taipei Medical University, Wan-Fang Hospital and Min-Sheng Healthcare are some major hospitals in Taiwan.

#### Popular treatment options

Orthopaedics, fertility treatment, cardiology, and cosmetic surgery procedures are popular medical treatment areas sought by medical tourists in Taiwan. Some of the country's major strength areas include cranio-facial surgery, liver transplant, obesity control, health examination, ophthalmologic therapeutics, and dental surgery.

#### Savings

The average cost of medical procedures in Taiwan is 40 to 55 per cent less as compared to the U.S.

#### Cost comparison of key medical procedures, USD

Treatment	Taiwan	U.S.
Heart bypass with heart valve replacement	30,000	1,30,000
Hip replacement	8,800	43,000
Prostrate surgery	2,750	10,000 — 16,000

Source: 'Indian Healthcare Services', J.P. Morgan, 12 March 2014, p2; 'Medical Tourism in India: Progress, Opportunities and Challenges', Madras School of Economics, Monograph 26/2013, March 2013, p21.

# Lessons to learn from Asia Case study: Taiwan

#### Government initiatives85

In 2007, the government established the Taiwan Task Force on Medical Travel (TTFMT) to promote the country as a preferred medical travel destination. Steps such as e-visa service for Chinese tourists to visit Taiwan for physical check-ups, cosmetic surgery, and anti-ageing treatments, establishing health centres at the airports to provide medical consultation to tourists were taken to enhance medical tourism in the country. The Council for Economical Planning and Development plans to develop 'free economic demonstration sones' to develop Taiwan as a regional hub for critical medical care and medical tourism. The government is also promoting medical tourism at worldwide fairs and shows

#### Outlook

Taiwan is expected to transform into a major medical tourism destination with its advanced medical technologies, reasonable fee, excellent public hygiene environment, and the recent support given by government policies. The number of medical tourists from China are expected to increase in the future since the country is strategically focussing on attracting more medical tourists from China after the government's decision to relax travel restrictions on Chinese tourists.

#### Recent developments

The local government in the eastern county of Hualien has established a provincial medical tourism association to support 67 regional medical facilities and tour operators. This association is likely to offer select medical packages to the Chinese luxury health travellers and medical tourists from the West. Further, a Taipei-based healthcare company has launched a new medical tourism service that offers aerial tours of Taiwan targeting medical tourists from Japan, South Korea, Indonesia, Vietnam, and Thailand.

#### Number of medical tourists and estimated revenue generated

	2010	2011	2012	2013	
Total tourists	5.56	6.08	7.31	8.01	
Number of medical tourists (includes number of tourists for medical services, medical cosmetics, and health examination)	1,10,664	1,09,133	1,73,311	2,00,000 (estimated)	
Estimated revenue (NTD billion)	NA	NA	70	NA	
	Top five* medical tourists by nationality				
1	NA	China	China	China	
2	NA	NA	Indonesia	Hong Kong	
3	NA	NA	The Philippines	Indonesia	
4	NA	NA	U.S.	Malaysia	
5	NA	NA	Vietnam	The Philippines	

Source: KPMG in India analysis, 2014; Mindpower solutions, 23 January 2012, p30; 'Statistics release', Tourism bureau, M.O.T.C Republic of China, (Taiwan), http://admin.taiwan.net.tw/statistics/release\_en.aspx?no=7, accessed 5 August 2014

<sup>\*</sup>Note: Ranks are based on number of patients receiving medical treatment

Medical tourism industry in Indonesia is at a nascent stage. Around 600,000 Indonesian patients travelled overseas for medical treatment, spending USD 1.4 billion in 2012<sup>86</sup>. Poor domestic healthcare service is a major motivation for Indonesian to travel overseas for better healthcare treatment. The government has launched a unified movement through the Ministry of Tourism and the Ministry of Health in 2013 to establish health tourism in the country.

#### Advantage Indonesia

Low priced medical treatment options, low cost of labor, and medical good, along with vast hospitality facilities are major advantages enjoyed by medical tourists in Indonesia. Indonesia also provides quick services to medical tourists.

#### Hospitals

Indonesia has 17<sup>87</sup> healthcare facilities with JCI accreditation. Siloam hospital, Mayapada hospital, Erha Clinic, Pondok Indah hospital and Premiere Bintaro Hospital are some of the major healthcare players in the country.

#### Popular treatment options

Cosmetic surgery and dentistry procedures are two popular medical treatment areas sought by medical tourists in Indonesia.

#### Government initiatives

In 2013, Indonesia's Ministry of Health and Ministry of Tourism created a 'Indonesia Wellness and Healthcare Tourism' team to work closely with public and private stakeholders, spa providers, and health associations to help promote health tourism. The government is also working on developing traditional medicine as a tourism attraction. The government has identified the following four regions: Bali, Jakarta, Makassar, and Manado to develop them as health tourism destinations based on the existing healthcare facilities and sight seeing places for tourists.

#### Future outlook

With government support and infrastructure development, Indonesia can attract medical tourists from around the world.

#### Recent developments

Siloam hospital chain is expected to more than double its bed capacity by 2017, to reach 10,000 beds.

INDONESIS- Indonesia wants to become a health tourism destination, International Medical Travel Journal website, http://www.imtj.com/news/?entryid82=405903, accessed 5 August 2014

 <sup>&#</sup>x27;JCI-Accredited Organisations', Joint
 Commission International website, http://www.
jointcommissioninternational.org/about-jci/jci-accreditedorganisations/, accessed 5 August 2014

Individually, states have also been engaged in promoting medical tourism and attracting international patients

#### Kerala

The Kerala Tourism Development Corporation has been engaged in promoting medical tourism in the state since the 1990s. Popularly known as the hub of ayurveda, Kerala has been able to emerge as a key medical tourism destination. The state has been successful in increasing the quality of treatment provided to medical tourists through tie ups with various government and private ayurveda centres. Two kinds of classification for ayurveda centres: Green Leaf and Olive Leaf have been introduced by the Kerala Tourism to keep a check on the quality of ayurveda88. The centres are made to adhere to strict criteria and guidelines to obtain these classifications, which help ensure the credibility and quality of the service providers. Ayurveda has been successful in curing diseases like autism, Alsheimer's, migraine, diabetes, sexual disability, slip disc, etc. Kerala is home to more than 100 government-run Ayurveda hospitals with over 2,700 beds, numerous private health centres, approximately 750 dispensaries, and more than 800 registered ayurveda medicine manufacturing units89.

#### Goa

The Goa Tourism board started the promotion of medical tourism in 2008, which resulted in several dental clinics thriving in the coastal belt and medical tourists flocking to the state. In order to provide a boost to ayurveda in the state, the state government is planning to start 'Panchkarma' or the five body purifying procedure branch at district hospitals.90 The government also plans to grant permissions to star rated hotels to increase the bed capacity by 8,000 beds in the next five years to meet the growing demand for medical tourists.91

#### Maharashtra

In 2003, the Maharashtra government set up the Medical Tourism Council of Maharashtra, in collaboration with FICCI, (Western Region Council) as a nodal agency to manage medical tourism operations and promote the state's healthcare facilities<sup>92</sup>. The government is also making continuous efforts to improve its tourism infrastructure. In this regard, it has been declared the safest state in the country<sup>93</sup>.

#### Tamil Nadu

In order to expand the scope of medical tourism in Tamil Nadu, the state government announced plans to build a 'medicity' with PPP under its vision 2023 programme<sup>94</sup>. The government also engages in promotion of medical tourism via regular conferences and exhibitions. For instance, it organised 'Tamil Nadu Health Tourism' conference in Chennai in 201395. The state focusses on the importance and use of a coordinated effort to make it a preferred destination for medical tourists.

<sup>88.&#</sup>x27;Analysis of Tourism demand in Kerala', Kerala Government website, p21

<sup>89. &#</sup>x27;Kerala Home of Ayurveda', Kerala Tourism website, https://www.keralatourism.org/avurveda/kerala-home-ofayurveda.php, accessed August 2014

<sup>90. &#</sup>x27;Government making efforts to promote ayurveda: Parsekar', Goacom, 4 November 2013

<sup>91. &#</sup>x27;Goa invites hoteliers to promote medical tourism', India Hospitality Review, 21 August 2013

<sup>92. &#</sup>x27;Government launches medical tourism council', Times of India, 20 November 2003

<sup>93. &#</sup>x27;Tourism Minister lauds Maharashtra's tourism infrastructure', Voyagers World, 20 July 2013

<sup>&#</sup>x27;Chennai attracts 40% of medical tourists visiting India: CII', Travel Biz Monitor, 25 April 2013

<sup>95. &#</sup>x27;Booming medical tourism woos NRI docs from UK', Deccan Chronicle, 20 April 2013

The industry, at large, has been providing the required support to India to create a strong position in the global medical tourism market

- The existing hospitals/healthcare centres are religiously working towards creating advanced infrastructure and meeting global standards to attract international patients
  - Apollo Delhi was the first hospital in India to be accredited by the JCI, U.S.
  - **Special wards/desks** for international patients have been created to cater to the medical tourists
  - For instance, super specialty hospitals like the Hiranandani Hospital in Mumbai and Apollo Hospitals have special overseas patient care centre and trained staff to exclusively cater to the needs of medical tourists. Some special services provided include translator facilities, accomodation facilities, recreational options, wide variety of food menu suiting the needs and tastes of different people, etc.96
  - Hospitals are also engaging themselves in promoting specific states as medical tourism destinations
  - For instance, with the launch of Apollo Specialty Hospitals in Trichy, the founder had also emphasised on helping explore the city's potential in medical tourism and its promotion in this regard.97
  - In an effort to connect international patients with quality medical services available in the country, industry stakeholders are increasingly tying up with travel/tour operators
  - Apollo Hospitals' recent tie-up with Emirates allows international patients and their attendants from 19 countries across the Middle East and Africa to travel to the group's flagship hospitals in Chennai, Hyderabad, New Delhi, Kolkata, Ahmedabad, and Bengaluru at specially devised fares for roundtrip flights on the Emirates
  - Thomas Cook also has teamed up with Seven Hills Hospital in Mumbai to offer medical tourism packages98
  - Goa's Manipal Hospital plans to tie-up with travel agents and tour operators99
  - Doctor Z India Healthcare Pvt. Ltd., the first registered medical tourism company in north India, has partnerships with hospitals like Max, Fortis, Ivy, etc. Coordinators are appointed by the firm to attract international patients<sup>100</sup>.
  - **Developing international collaborations** (private/government) with developed or developing countries is also one of the strategies adopted by major Indian hospital players to promote medical tourism
  - These partnerships have not only facilitated training of medical professionals, but also enhanced the flow of patients to Indian hospitals. The treatment costs of such patients are then covered under the national health programmes of respective countries.

<sup>96.</sup> KPMG in India analysis 2014

<sup>&#</sup>x27;Hospital baron to promote Trichy for medical tourism destination', Times of India, 23 December 2013

<sup>&#</sup>x27;Thomas Cook ties up with hospitals for medical tourism', Hindu Business Line, 24 July 2012

<sup>&#</sup>x27;Manipal Hospital, Goa plans tie-ups with travel trade to boost Medical Tourism', Hospitality Biz India, 16 January

 <sup>&#</sup>x27;Chandigarh firm to start telemedicine project in Kenya', Business Standard, 25 August 2014

## Attractiveness matrix -Detailed calculations for every country

Attributes	KPMG weighassumptiontage	Max wt.		India Thailand		land	
		can be given	Rating	Wt. Rating	Rating	Wt. Rating	
Amenable legal framework	10%	1	5	0.5	9	0.9	
Cost effectiveness	25%	2.5	9	2.3	8	2	
Quality of healthcare	20%	2	8	1.6	8	1.6	
Hospitality	10%	0.5	6	0.6	9	0.9	
Healthcare infrastructure	15%	1.5	7	1.1	8	1.2	
Beyond allopathy	5%	1	9	0.5	8	0.4	
Government initiatives	10%	1	5	0.5	9	0.9	
Macroeconomic factors	5%	0.5	6	0.3	6	0.3	
Total	100%	10		7.2		8.2	

#### Methodology

- 1. Each parameter has been assigned a weightage assumption based on the input received from industry experts. In case of medical tourism, cost effectiveness, quality of healthcare and healthcare infrastructure emerged as the most important factors for international patients to decide on their destination of choice.
- 2. Each parameter (for every country) has been rated on a scale of 1 to 10, where 1 represents 'poor' while 10 represents 'excellent.
- 3. The ratings for each parameter have been assigned based on thorough analysis of secondary data as well as input received from various stakeholders across the industry
- 4. Weighted rating has been calculated by multiplying each rating with corresponding weightage, as assigned.
- 5. The total value for each country represents the summation of weighted rating for each parameter.

Singapore		Mala	nysia	Taiwan		Indonesia	
Rating	Wt. Rating	Rating	Wt. Rating	Rating	Wt. Rating	Rating	Wt. Rating
8	0.8	8	0.8	6	0.6	8	0.8
5	1.3	8	2	5	1.3	8	2
9	1.8	6	1.2	8	1.6	4	0.8
8	0.8	7	0.7	5	0.5	6	0.6
9	1.4	6	0.9	8	1.2	4	0.6
5	0.3	5	0.3	5	0.3	5	0.3
7	0.7	8	0.8	7	0.7	6	0.6
9	0.5	7	0.4	8	0.4	6	0.3
	7.4		7		6.5		5.9

### Research methodology

#### Introduction to the research:

The purpose of this research is to provide an insight in to the medical value travel in India, discovering holdups in India's medical tourism practice, process flow and policies. KPMG in India would want this report to contribute meaningfully to the realisation of the eventual objective of making India one of the world's leading medical tourism destination.

#### Research methodology:

KPMG in India conducted detailed primary interviews with different stakeholders at various levels of the medical tourism value chain and ecosystem (between July 2014 to August 2014). The research was managed by KPMG's healthcare sector team. The research included insights from stakeholders based in India and other Asian countries, and included a broad spread of organisations in terms of size, products or services, and strategy.

#### Participants:

The research is based on data gathered from the structured primary interviews conducted with industry leads across the healthcare spectrum. The primary research focussed on telephonic/ face-to-face conversations which lasted approximately one hour. The

interviewees included public sector stakeholders and domestic company heads/CEOs of renowned hospitals.

This primary research was complimented with secondary analysis and industry insights.

#### Interview questions:

The questionnaire was a balance of qualitative and quantitative questions. The primary interviews covered topics including:

- The recent trends of medical tourism in India vis-a-vis the global medical tourism industry
- The expectations of private players and infrastructural support required from the government
- Most preferred Asian destination of medical tourists and the reasons for it
- Best practices of other Asian medical tourist destinations
- Issues and challenges being faced by the Indian medical tourism industry, along with possible solutions
- The requirements to stimulate medical value travel in India.

The information gathered during the primaries including the point of views of various interviewees was collated and converted in the required format for representation in the report.



APHM

	Association of threate hospitals of initially sid
CAGR	Compounded Annual Growth Rate
CEO	Chief Executive Officer
C00	Chief Operating Officer
СРІ	Corruption Perception Index
EPI	Environmental Performance Index
FTA	Foreign Tourist Arrival
GDP	Gross Domestic Product
GPI	Global Peace Index
GTI	Global Terrorism Index
HDI	Human Development Index
ICU	Intensive Care Unit
JCAH0	Joint Commission on Accreditation of Hospital Organisations
JCI	Joint Commission International
MATRADE	Malaysia External Trade Development Corporation
MD	Managing Director
MDA	Market Development Assistance
МНТС	Malaysia Healthcare Travel Council
MIDA	Malaysian Investment Development Authority
MOHF	Ministry of Health and Family Welfare
MOIA	Ministry of Overseas Indian Affairs
MoU	Memorandum of Understanding
MRI	Magnetic Resonance Imaging
NABH	National Accreditation Board for Hospitals & Healthcare Providers
NCD	Non-communicable Disease
NCR	National Capital Region
ODA	Official Development Assistance
OECD	Organisation for Economic Cooperation and Development
PET	Positron Emission Tomography
PPP	Public Private Partnership
SAARC	South Asian Association for Regional Cooperation
SCP	Single Consultative Platform
TAT	Tourism Authority of Thailand
U.A.E.	United Arab Emirates
U.K.	United Kingdom
U.S.	United States
VP	Vice President
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