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Transformative Evolution: From 'wellness' to 'medical wellness' tourism in Kerala

A whitepaper on the trends and recommendations for enhancing medical value tourism in the State of Kerala

October 2015

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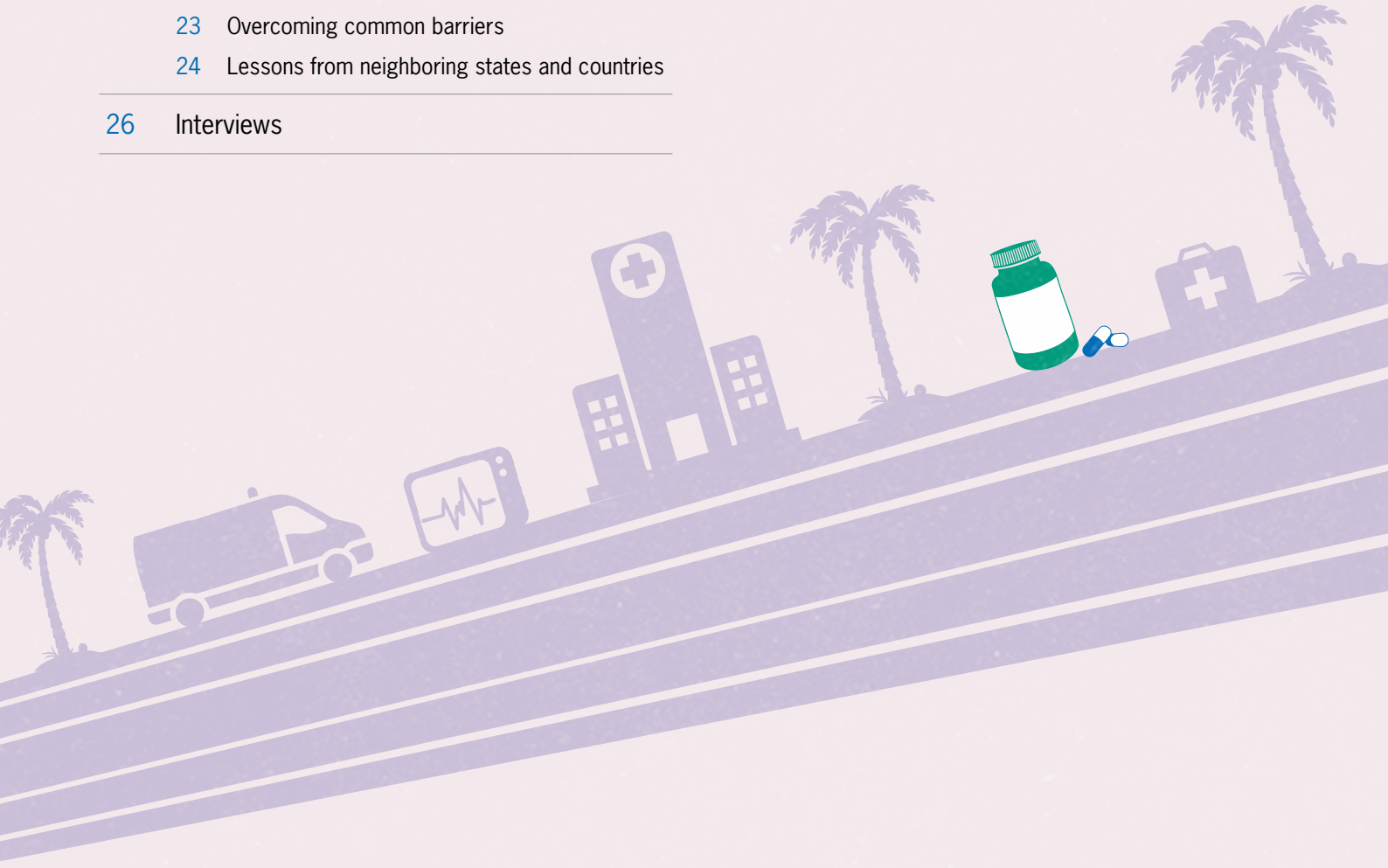


Foreword

Dr. Azad Moopen
Chairman, Kerala health tourism 2015, Chairman & MD, Aster DM Healthcare

It is with great pride that we place before you the report on Transformative Evolution: From 'wellness' to 'medical wellness' tourism in Kerala. Medical tourism globally is a US$17 billion market and is expected to cross US$40 billion by 2020. India along with countries like Thailand, Malaysia, Singapore, Mexico etc. plays a key role in shaping this market opportunity. Many studies have been conducted to understand the potential of this industry and how we should position ourselves in a better manner so as to cater to this growing sector. However, as an experienced professional in this field, I know and realise the difficulty of studying this field, given the obscurity in defining who a medical tourist is.

"Access world-class treatment at one-tenth price and use your savings to experience the tranquil backwaters, scenic beaches and pristine hill stations of God's Own Country" - Raising this slogan, the private sector, government and trade bodies of Kerala are initiating a coordinated action to transform the state into a world-class healthcare hub by 2020.

The state is well poised for tapping the billion dollar medical tourism opportunity, with several accredited facilities and is witnessing a large development boom of private medical healthcare facilities. A liberal social and tourist friendly environment, combined with traditional hospitality of the state and an outstanding tourism infrastructure, makes Kerala an ideal destination for Medical Value Tourism.

While MVT and dollar receipts are attractive from a Return on Investment (RoI) standpoint for any mega hospital project, there are serious healthcare challenges on the home front which also can be addressed by this new engine of hope and growth. Kerala today is the 'diabetic capital' of India; in the obesity rate, it is number two nationally; the age at which a Keralite suffers a heart attack has come down alarmingly to the 25-35 age bracket; incidence of cancer, especially among women, is at an all-time high. And for technologically advanced complex medical procedures, Keralites rush to nearby cities like Vellore, Bengaluru, Mangalore or Chennai. There is an urgent need to invest in tertiary and quaternary care hospitals that can effectively tackle three major categories of advanced technology-enabled healthcare services viz. invasive or surgical, diagnostic testing and lifestyle related. MVT dollars are critical to help cross subsidise such services so that Kerala can continue to adhere to its tradition of upholding Universal Healthcare. The forex revenue will also be instrumental in ensuring competitive compensation for medical professionals so that they do not have to risk their lives in war-torn Syria and Iraq. The state has only 23 hospitals that are accredited by NABH and only two of them are accredited by the JCI. Accreditation not only helps in communicating the quality of the services we offer in accepted terms, but also gives us an opportunity to upgrade ourselves in line with national and international expectations. A highly fragmented approach of current hospitals with each promoting their own area of strength, has also reduced the overall strength of medical tourism in the state. The medical tourism industry in Kerala can boom to be the global leader only if both the healthcare and tourism industry operators stand together to build up this sector.

Through this report, we hope to set a stage for discussions around policy initiatives to promote medical tourism, target markets and marketing strategies in health tourism and also understand the current challenges in international patient management, the future of health tourism and tourism as a concept of sustainable development.

Foreword

Vishesh C Chandiok
National Managing Partner
Grant Thornton India LLP

Kerala has been perceived as a key tourist destination on the global tourism landscape for over two decades now. Indeed as one of the leading states within the country, it has a history of bringing in positive foreign exchange. While most will argue that tourism statistics of the state are largely attributable to its popularity as a 'wellness destination;' we on the other hand, view this as an opportunity for the state to extend its status from mere 'wellness' tourism to 'medical wellness' tourism (a case in example would be Thailand which is now a leading global medical gateway of the world).

We are thankful to CII and fellow sponsors for presenting us this opportunity, to partner with it, to place Kerala on the world tourism landscape once again, albeit on the medical tourism world map. This report captures some of the key drivers of global medical tourism and aims to understand all aspects of a 'global patient's dilemma viz. - which country has a history of positive clinical outcomes, where are the costs lowest, what facilities are accredited and where is the access and value greatest. Nearly 80% of the current global medical tourists are driven by a cost consciousness across the globe. This, combined with accredited facilities, has led to the emergence of the several global medical tourism corridors – Singapore, Thailand, India, Malaysia, Taiwan, Mexico and Costa Rica.

Amongst these corridors of health, India has the second largest number of accredited facilities (after Thailand). The Indian Medical Tourism market is expected to grow from its current size of US$ 3 billion to US$ 7-8 billion by 2020. Gods own country- Kerala , is able to attract only 5% of these medical tourists currently, but has the potential to increase its share to a 10-12% of the overall market with a well thought out and focussed marketing strategy. Tamil Nadu, which has clearly become the healthcare hub of the country over the last decade, can well be used as a source of learning and for developing quality, affordable and accredited infrastructure in the state. Welcoming the tourists comes naturally to the state of Kerala since it is well equipped with leisure, travel, administrative and procedural facilities that make a foreigner prefer it as a travel destination.

At a national level, Bangladesh and Afghanistan dominate the MVT arrivals in India (34% of total arrivals), patients from Africa, GCC and CIS nations currently constitute only 30% of the total arrivals and currently seem to prefer alternative corridors of South East Asia. Tapping a larger share of the health wallet of the African, Asian, Middle East patients as well as welcoming tourists from other regions and countries needs to be followed as a national marketing campaign with the active support of the government and private sector.

A key factor driving the medical value tourism in the state will be availability of national as well as globally accredited facilities across the entire state, an area where Kerala lags behind when compared to the states of Tamil Nadu, Maharashtra, NCR and AP. Accreditations (whether JCI or NABH) and positive clinical outcomes, are often considered the benchmarks for evaluating facilities across the globe and provides a quality conscious patient the confidence and security about positive clinical outcomes.

We strongly believe that the tourism and leisure element of a state, combined with the infrastructure (healthcare and otherwise) is one of primary drivers of medical value tourists in state. With exemplary MVT performance by adjoining countries and adjoining states, Kerala is poised to monetise its wellness status by laying an equal emphasis on building accredited infrastructure and attracting and utilising state bred medical talent (doctors, nurses and paramedics) to provide world class medical facilities capable of servicing a floating medical population.

Kerala needs a thoughtful and a devised strategy to improve the medical infrastructure and marketing position, medical treatment along with wellness, and identify the existing and potential target markets in a steadily growing global medical tourism industry. From this report, we seek to map the current global medical value tourism landscape, benchmark the country with best practices across the existing global medical corridors, assess inter-state potential and performance, also leverage its wellness quotient and offer recommendations aimed towards making Kerala a favoured medical tourism destination.

Fast facts

NATIONAL HEALTHCARE AND TOURISM STATS

Overall healthcare market in India is estimated to be US$110 billion in FY15 with hospitals and healthcare delivery constituting 65-70%. Share of healthcare delivery is expected to grow upto US$ 165 billion by FY20.

Around 75% of total hospitals and 40% of total hospital beds (especially in the secondary and tertiary segments) are in the private sector.

India needs an additional 1.8 million beds to achieve the WHO target of 2 beds per 1,000 people by 2025. Also, an additional 1.54 million doctors would be required, and an investment of US$86 billion required to achieve these targets.

Private investments till date have mostly happened in large organised chains of hospitals with presence in Tier I cities (and in some cases Tier II) and seldom in standalone hospitals

Tourism in India accounts for 6.8% of the GDP and is the third largest foreign exchange earner for the country. Travel and tourism contributed US$40 billion to the country's GDP in 2014. With about 7.6 million foreign tourist arrivals in India, foreign exchange earnings from tourism amounted to US$20 billion in 2014.

While tourism is a major contributor to the country's GDP, India's share in international tourist arrivals is only 0.64% and has a long way to go with a current ranking of 41 globally.

KERALA STATS

Foreign tourist visits to Kerala have grown from about 2 lakh tourists in 2001 to over 9 lakh tourists in 2014 (contributing over 4% to the overall foreign tourist visits in India)

Kerala is amongst the states with the lowest infant mortality rate, maternal mortality rate and the highest literacy rate in the country

Kerala is the largest producer of the nursing and technician pool in the country and has a fairly robust doctor pool in the country

About 30% of the foreigners visit Kerala for wellness reasons and about 40% of the State's tourism revenue is generated from Ayurveda

Kerala has 2 JCI accredited facilities, 23 NABH accredited hospitals out of the 25 and 317 accredited facilities in the country respectively, and 2 ACHS accredited facilities

Medical Tourism Landscape

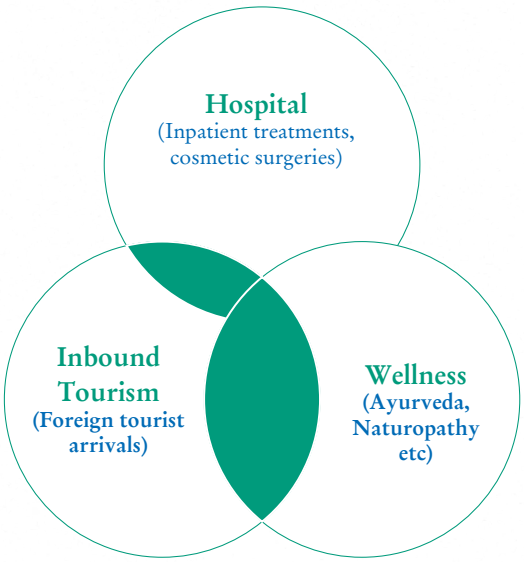
What do we mean by Medical Tourism

Medical tourism is the convergence of foreign tourist arrivals with medical assistance. When distinguished from mere medical tourism, wellness pertains to preventive while medical invariably refers to curative care. Even within medical tourism, the therapeutic drivers range from cosmetic or dental treatments to highly complex transplants, cardiac and replacement procedures.

The tourism and leisure element of the states combined with the infrastructure (healthcare and otherwise) is one of the primary drivers of tourist attractions in a state.

Tourism would be accompanied by medical only in the case of wellness or non-ailment associated treatments. Owing to these fundamental differences, the global medical tourism market sizes have been estimated very differently according to various sources with the Americas generating 26%, a significant 55% by the APAC region followed by the EMEA region at 19%.

The global medical tourism market was estimated to be **US$17 billion in 2015** and it will reach a market value of **US$40 billion by 2020** growing at a CAGR of 17 % during the forecast period.



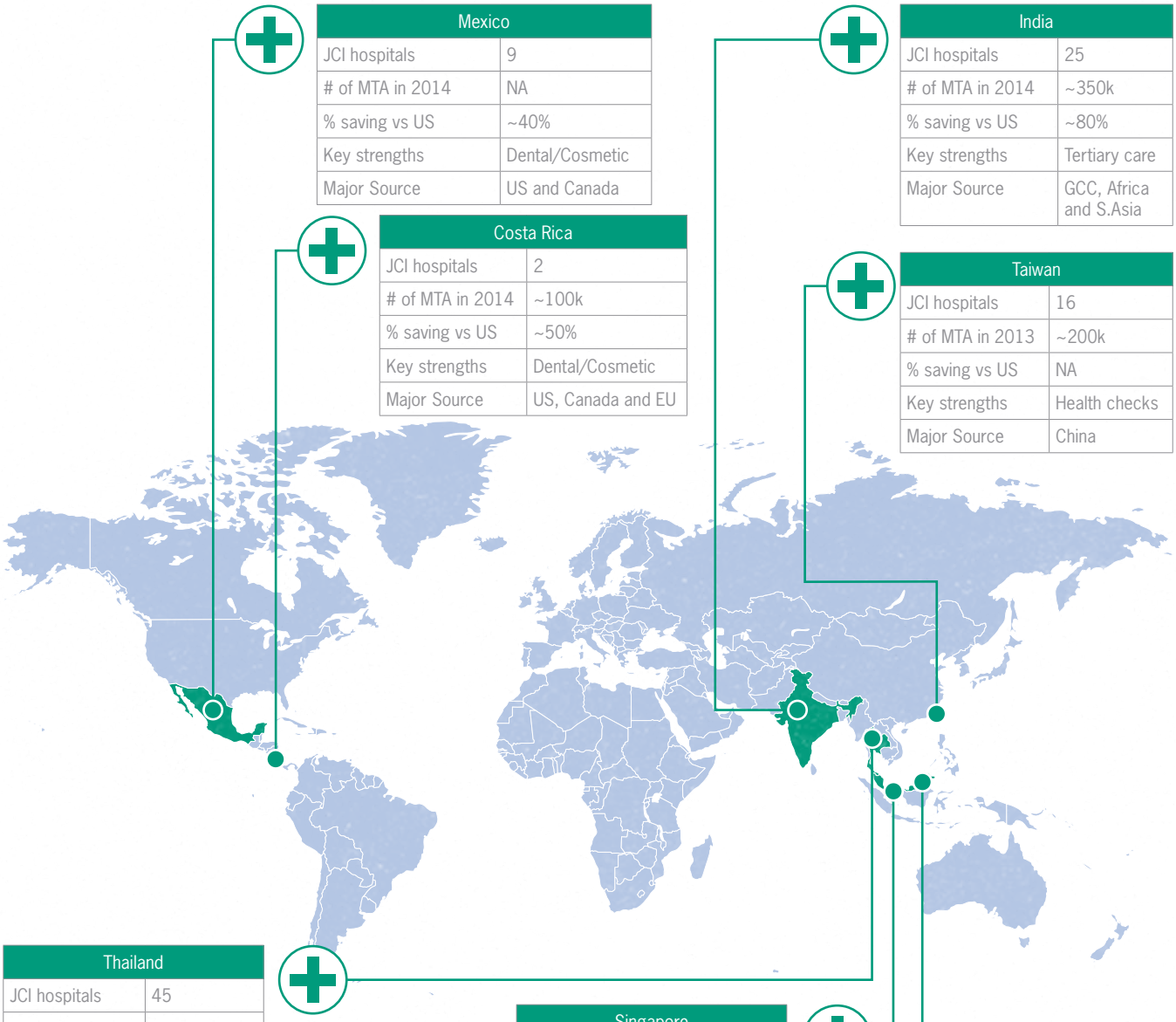
Medical Value Tourism =
Clinical Outcome +
Quality of service and infrastructure +
Wellness Experience –
Treatment Cost

*this is not mapped to any scale or size

Global healthcare landscape

North America	South America	North Africa	SE Asia	GCC AND CIS	UK
• Supply>Demand • High quality of infrastructure • High insurance penetration • High cost of healthcare for un/ under insured • Large number of tourists travelling to the US for complex surgeries.	• Demand>Supply • Moderate insurance penetration • Pockets of world class health infrastructure • Few pockets of world class health infrastructure like Brazil	• Demand>Supply • Lack of facilities • Low insurance penetration • Growing economic footprint • Growing economic footprint and corporate penetration	• Demand>Supply • Lack of facilities in less developed regions while Thailand, Singapore, Malaysia have good medical infrastructure • Strong tourism corridor • Low insurance penetration	• Demand>Supply • Lack of facilities in most regions • Strong tourism corridor with South Asia • High affordability • Low insurance penetration	• Local demand ~ Supply • High quality of infrastructure • Largely self sufficient healthcare economy • high quality of healthcare

Medical Tourism Corridors



Mexico	
JCI hospitals	9
# of MTA in 2014	NA
% saving vs US	~40%
Key strengths	Dental/Cosmetic
Major Source	US and Canada

India	
JCI hospitals	25
# of MTA in 2014	~350k
% saving vs US	~80%
Key strengths	Tertiary care
Major Source	GCC, Africa and S.Asia

Costa Rica	
JCI hospitals	2
# of MTA in 2014	~100k
% saving vs US	~50%
Key strengths	Dental/Cosmetic
Major Source	US, Canada and EU

Taiwan	
JCI hospitals	16
# of MTA in 2013	~200k
% saving vs US	NA
Key strengths	Health checks
Major Source	China

Thailand	
JCI hospitals	45
# of MTA in 2014	~900k
% saving vs US	~50%
Key strengths	Tertiary and cosmetic
Major Source	Japan, US and GCC

Singapore	
JCI hospitals	21
$mn MTA earnings	C$900mn
% saving vs US	30-35%
Key strengths	Tertiary
Major Source	SE Asia and US

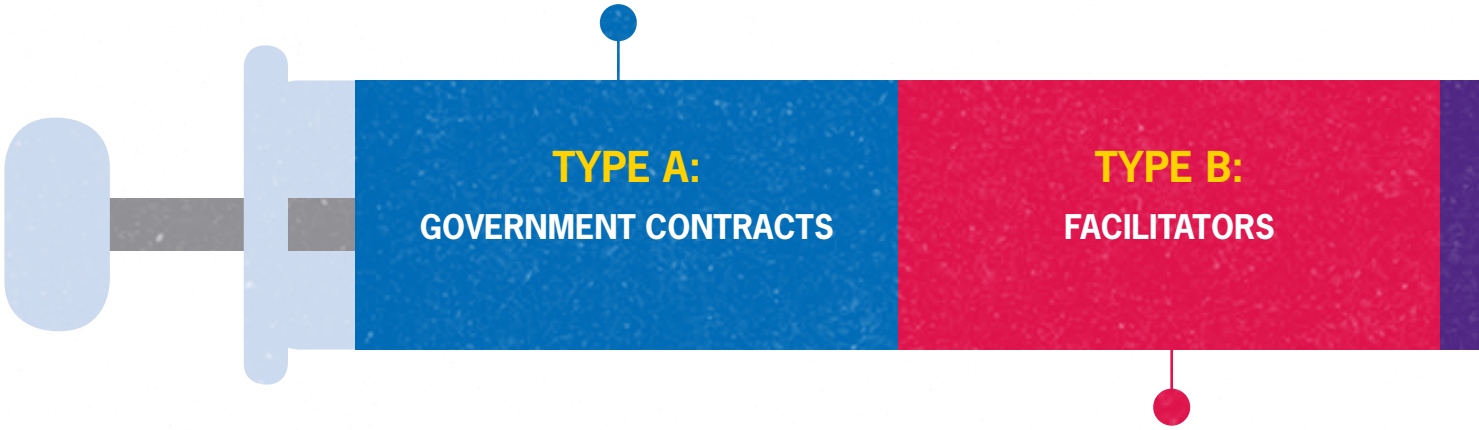
Malaysia	
JCI hospitals	13
# of MTA in 2013	~700k
% saving vs US	~60%
Key strengths	Cosmetic, secondary care
Major Source	Indonesia and GCC

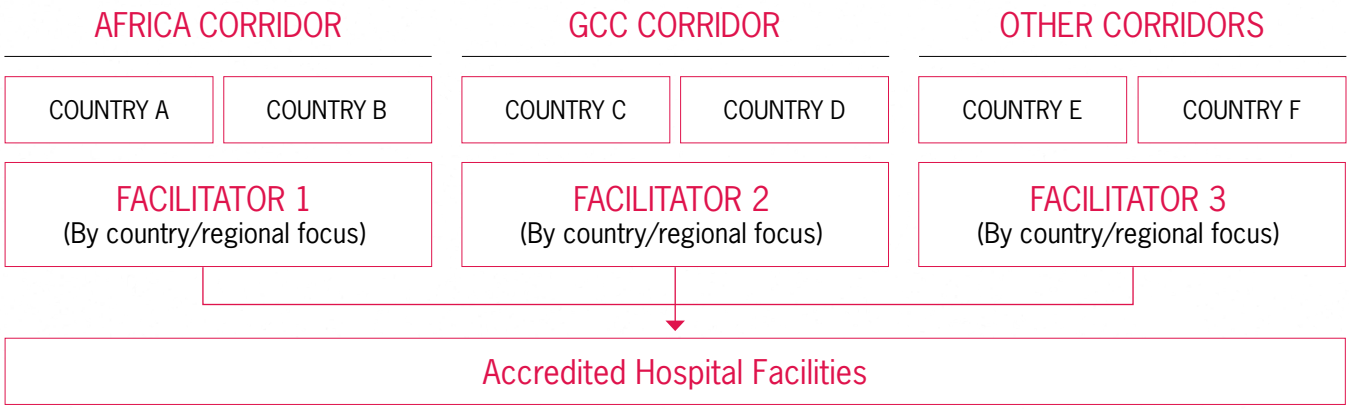
Other major corridors are Turkey, Israel, Brazil, Indonesia, South Korea

Existing medical tourism models

Largely individual hospital/state driven effort to reach out to health representatives with the governments in these regions. Typical MoUs with governments guarantee fee for the hospitals as well as streamlining patient footfalls. Typical contractual terms:

- Governments take responsibility for the payments
- Discounted package rates agreed (OPD and IPD) with additional facilities (airport pickups, single point of contact, interpretation services, food preferences, room upgrades)
- Validity – 2/3 yrs or above

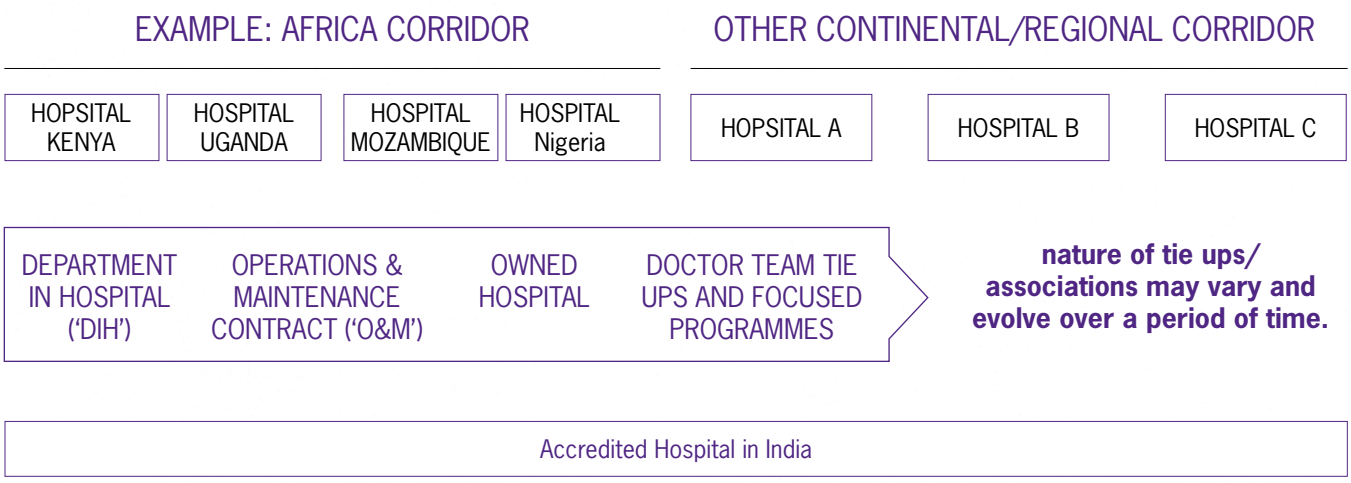




Such facilitators could be individuals or marketing agencies undertaking to source patients from specific corridors and channelizing them to the hospital partner network for a commission. Typical risks associated with facilitators include patient screening and credit evaluation, diversions to other hospitals, payment guarantee and exclusivity.

Typical contractual terms:

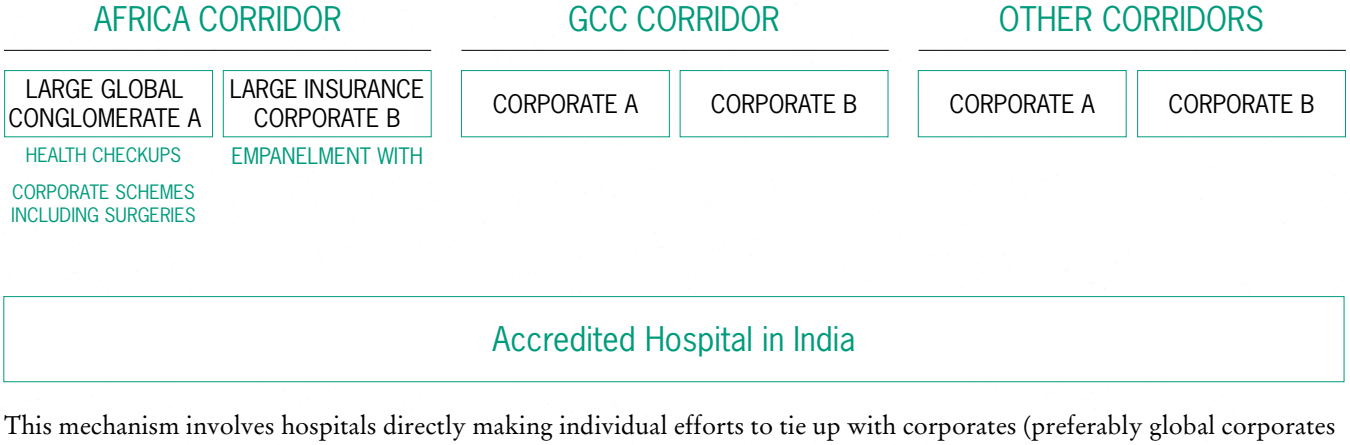
- 15-20% of the collected fee from patients (can be moderated for specific complicated surgeries
- Facilitation fee payment only post collection of dues from patients
- Regional exclusivities



This mechanism involves hospitals directly making individual efforts to tie up with hospitals in foreign countries whether by way of greenfield/brownfield investments and acquisitions or in the nature of tie ups such as shop in shop operations/ complete operations and maintenance contracts. The nature of tie up can evolve over a period of time and primarily intend to route complicated surgical treatments to facilities in India.

TYPE C: OVERSEAS OPERATIONS AND TIE UPS

TYPE D: CORPORATE TIE UPS/ASSOCIATIONS



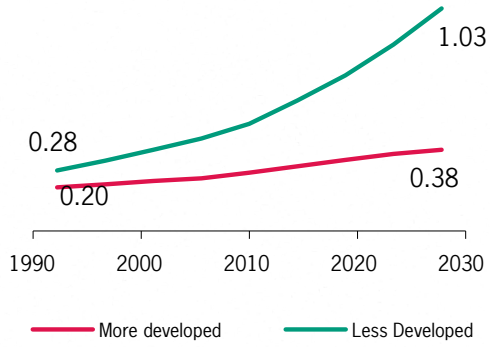
This mechanism involves hospitals directly making individual efforts to tie up with corporates (preferably global corporates with offices in India, Africa, GCC and other Asian Countries) in overseas locations. The nature of tie up can evolve over a period of time and usually starts with a general health checkup scheme and primarily intend to route complicated surgical treatments to facilities in India.

Key drivers for medical tourism

Non communicable and lifestyle related diseases are on the rise contributing to more deaths globally; primary causes are cardiac, cancer, kidney, respiratory, diabetes and these result in the need for complex surgeries and advanced care.

Rapidly ageing population with c30 % of the population in developed regions (with access to medical facilities) and c15% population in less developed countries (with limited access to quality facilities) estimated to be aged over 60 by 2030.

Persons aged >60 in billion



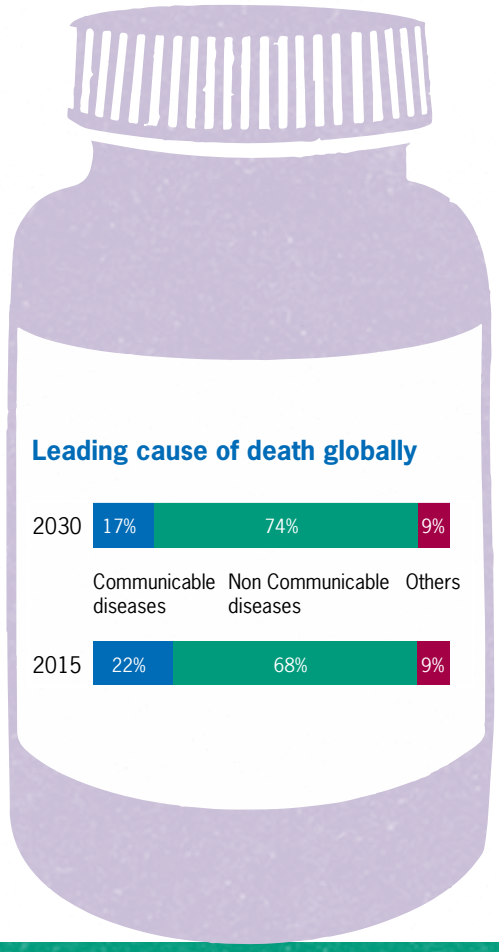
Prohibitive costs of healthcare in certain regions - despite having the best of facilities, exorbitant healthcare cost in countries like US, UK drive underinsured and uninsured patients to seek medical assistance in other countries. Moreover, not all treatments are covered by insurance.

Lack of availability(waiting time) of healthcare facilities in regions such as Middle East, portions of Africa and CIS which have the ability to pay but lack quality care and talent.

Lower insurance penetration in several parts of the less developed world makes patients and families explore least cost, most secure and comfortable avenues for healthcare.

A floating **techno-medical** population

Availability of globally accredited institutions which increases the choices available to patients assuming healthcare outcomes in each of these regions are comparable and affordable.



Treatments in Asian countries are

30-80%

cheaper than in the US

With rising healthcare costs in developed countries medical tourism often provides an alternate way for uninsured or underinsured patients to obtain economical treatment. This has led to various hubs or pockets of medical tourism – leading the way - Thailand, India, Mexico, Singapore, Malaysia Costa Rica.

Addressable market for India

Indian medical tourism is expected to grow from a current market size of

cUS$3bn

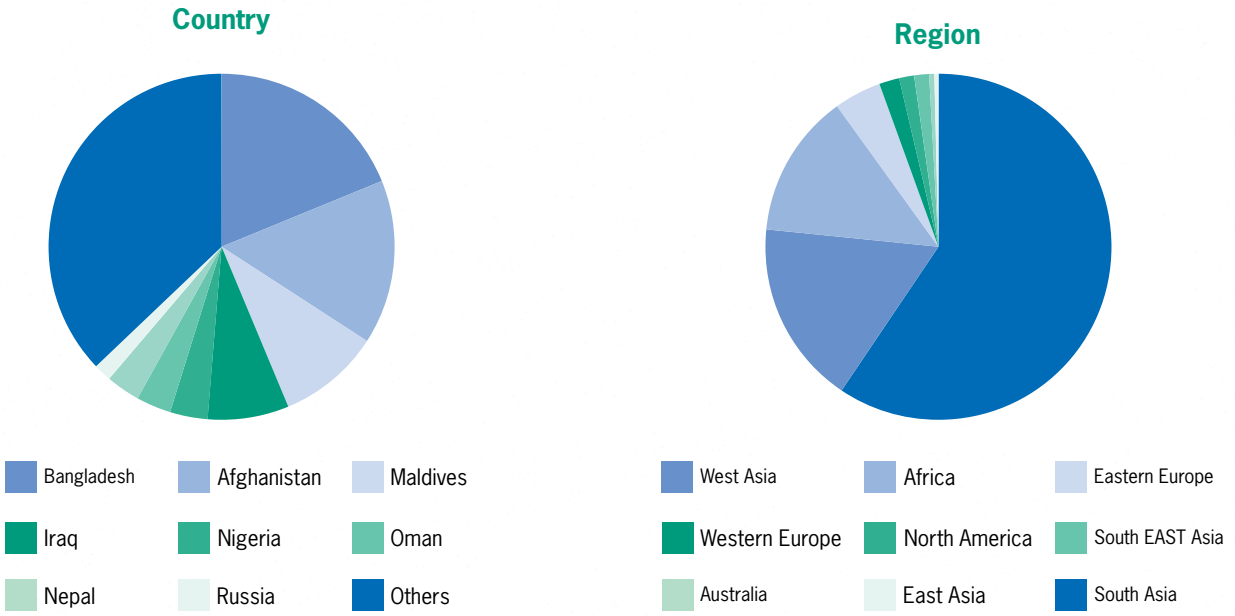
to

US$7-8bn

by 2020

MTA profiling: large portion of developed economies untapped

Medical tourist arrival by

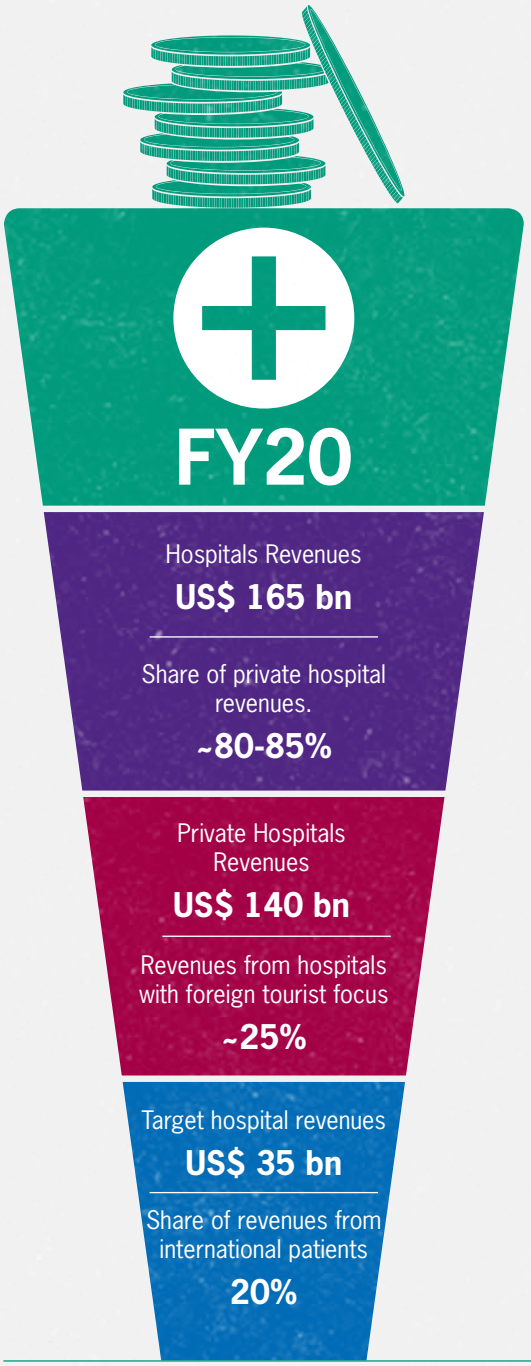


Source MoT, GT estimates

Bangladesh and Afghanistan dominate the Indian MVT arrivals currently (at a 34% share of the total). Africa, GCC and CIS regions (whose current share is just 30%) present the maximum possible opportunity for the Indian healthcare sector. Medical tourists from these sectors currently favour the South East Asian medical corridors.

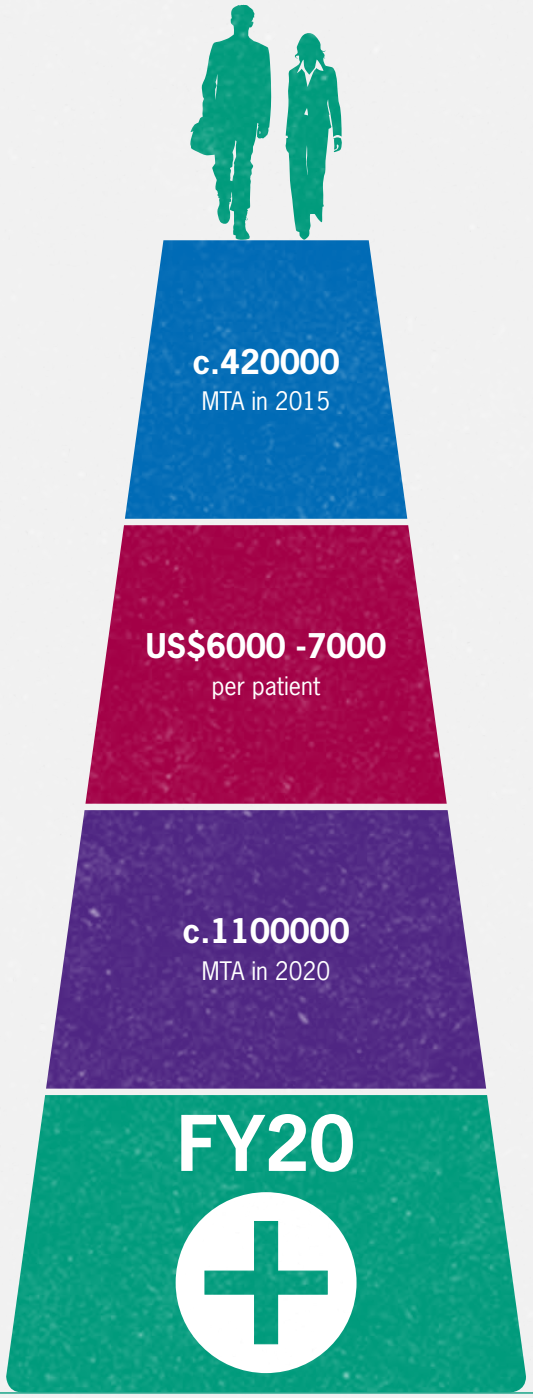
Market size based on

Hospital revenue projections



~US$ 7 bn

Footfalls



~US$ 7.7 bn

The India Advantage

Cost competitiveness

According to an MTA patient survey report, nearly 80% of the demand for medical tourism is driven by cost savings..

	% savings in other countries vs United States						
Sample treatments	**India**	**Thailand**	**Singapore**	**Malaysia**	**Mexico**	**Costa Rica**	**South Korea**
Hip Replacement	84%	73%	73%	78%	69%	74%	77%
Knee Replacement	79%	76%	69%	80%	64%	74%	71%
Spiral Fusion	77%	61%	32%	56%	45%	58%	56%
Heart Valve Replacement	94%	93%	91%	94%	80%	80%	72%
Gastric Bypass	62%	33%	25%	56%	39%	39%	31%
Face-lift	72%	57%	30%	57%	58%	64%	52%
Rhinoplasty	53%	31%	23%	44%	55%	44%	23%
Heart Bypass	95%	92%	86%	93%	80%	82%	77%

Availability of Nationally/Globally Accredited Institutions.

JCI accreditation is considered the gold standard in global health care and provides quality conscious patients confidence and security about clinical outcomes. The more accredited hospitals a country has, the better its positioning in the global medical tourism arena. Even insurance companies that consider financing procedures undertaken abroad mandate JCI as a necessary condition. While JCI is globally recognized, hospitals certified by national boards such as NABH also tend to meet global standards in clinical outcomes and processes and India boasts of over 300 such facilities offering immediate care of seekers.

Countries	**Number of JCI accredited facilities**
India/Kerala	25/2
Thailand	45
Singapore	21
Malaysia	13
Indonesia	20
Israel	20
South Korea	26
Sri Lanka	2
Taiwan	16
Costa Rica	2
Mexico	9

States	**NABH hospitals**
NCR	>70
AP	45
MH	33
KA	28
TN	27
GJ	23
KL	23
PJ	23
RJ	10
WB	9
OR	5

Kerala's position in the global and domestic MVT landscape

State Tourism Contemporaries

$4bn
Overall Tourism revenue in Kerala - 2014

c.10%
Kerala's share of total tourism revenues in India - 2014

c.5%
Kerala's share of Tourism Foreign exchange earnings in India – 2014

Some may argue that the foreign tourism stats in the state are largely attributable to its popularity as a wellness destination, others can comprehend this as an opportunity for the state to extend its tourism status from mere tourism to medical tourism. With exemplary MVT performance by adjoining states and adjoining countries, Kerala is poised to monetize its wellness status by laying an equal emphasis on building accredited infrastructure and utilising state bred medical talent to provide world class medical facilities capable of attracting a floating medical population.

Kerala FTA trend

Profiling Medical Arrivals

Chennai, Mumbai, AP and NCR are the most favoured medical tourism destinations for the floating medical population who avail treatments in India. While the number of MVTs itself is poised to grow at over 20% CAGR, Kerala needs to focus on its visibility as a healthcare destination amongst other states.

Top Countries for FTAs and MTA and favored destinations

Top regions	FTAs	MTA % of FTA	MTA	Favored destinations	Why they go		
					Cost	Infrastructure	Proximity
Africa	2,80,754	16.3	45,847				
Nigeria	28,314	42.4	**12,005**	**Chennai**	✓	✓	
West Asia	**4,13,678**	**14.1**	**58,515**				
Iraq	**48,321**	**53.5**	**25,852**	**Chennai, NCR, MH**	✓	✓	
Oman	**88,512**	**12.5**	**11,064**	**Chennai, NCR, MH, Kerala**	✓	✓	✓
Afghanistan	**1,15,569**	**45.3**	**52,353**	**NCR, MH**	✓	✓	✓
South Asia	16,94,857	11.9	2,02,705				
Maldives	**65,052**	**50.1**	**32,591**	Chennai, Kerala, MH	✓	✓	✓
Nepal	1,26,416	8.6	10,872	Kolkata, NCR	✓	✓	✓
Bangladesh	9,42,562	6.8	64,094	Kolkata		✓	✓
North America	13,87,468	0.3	4,787				
USA	11,18,983	0.3	3,357	Chennai, AP, MH, NCR	✓		
Western Europe	18,60,580	0.3	6,419	MH, NCR	✓		
Eastern Europe	4,22,278	3.6	15,054	MH, NCR	✓		
Russia	2,69,832	2.1	5,666	NCR	✓	✓	
South East Asia	6,85,805	0.7	4,732	Chennai, AP	✓		✓
Total	76,79,099	4.4	336K				

Source: Ministry of tourism, GT Analysis

Potential opportunities for Kerala

Addressable market for Kerala

Kerala with a **c5-7%** of current market share (translating to **cUS$200mn** of medical tourism revenues) can easily capture a 10-15% of the estimated market by 2020 signifying a localised medical tourism market of a size **cUS$ 1 billion.**

Based on industry reports Tamil Nadu attracts about 40-50% of medical tourist arrivals in the country, followed by Maharashtra and NCR. While clear estimates of FTA for medical reasons cannot be ascertained, it can be safely assumed that Kerala currently attracts 5-7% of the total foreign medical tourist arrivals who avail modern complicated medical treatments (excluding wellness which has been Kerala's forte and where it is already positioned as the topmost destination).

Existing Corridors that Kerala can easily tap

Key existing corridors	Potential Opportunity	To leverage on
GCC to various Indian states	**High**	Direct connectivity, expat population strength
Africa to South India	**Moderate to High**	Showcase clinical excellence at par with competition

Potential Corridors for Kerala

Corridors	Potential Opportunity	To build on
Western Countries to various Indian states	**High**	Wellness brand image already created among Western tourists
West and South Asian to various Indian states	**Moderate to High**	Improve promotion, direct connectivity

The Kerala Advantage

03
International airports

918/1,833
Avg population served per Govt hospital Bed Kerala/India

138/472
Average population per Nurse Kerala/India

792/1,319
Average population per registered doctor Kerala/India

1,581
Registered AYUSH hospitals

30%
% of foreign travelers availing wellness treatment in Kerala

>100
Government certified Green and Olive leaf Ayurveda centers

The Infrastructure Edge

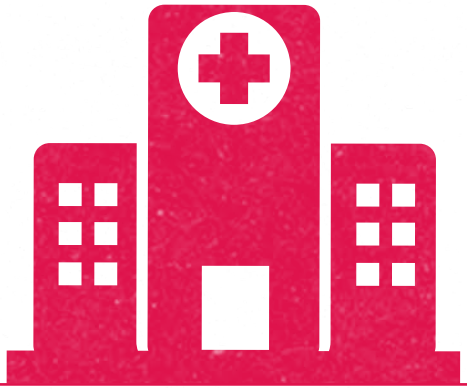
Despite being a small state in terms of geographical area, Kerala boasts of 3 well spread out international airports in Kochi, Trivandrum and Calicut with direct connectivity with all GCC countries and most Asian countries. In terms of medical infrastructure the public health system in the state fares much better than the national average, resulting in the state recording among the lowest IMR and MMR in the country.

Qualified manpower surplus

The state with the highest literacy rate in the country, is also considered as the "Nursing hub" for regions West of Europe. While several other states have increased the number of nursing institutions to produce an equal or higher number of quality nurses, the demand from the state continues to remain one of the highest.

Playing the wellness card

Kerala has been synonymous with wellness & Ayurveda and with the State taking ample measures to certify Ayurveda centers and hospitals under the Green and Olive leaf banner to ensure consistent and world class quality. More and more foreign tourists, especially from developed countries throng the state to avail such services.



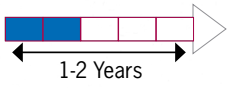
Roadmap

Overcoming common barriers

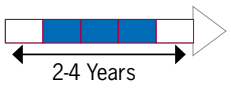
Areas	Common Barrier	Status
Insurance Lack of cross border insurance portability	Medical tourism expenses are mostly paid out-of-pocket by patients who either have no insurance coverage or whose insurance does not cover the medical procedures they want, for example, cosmetic surgery.	Very few insurance companies have globally accepted medical toursim packages and are currently in an exploratory phase with established institutions. US insurers post Obamacare and specific Asian hospitals (e.g. Thailand's Bumrungrad hospital) have also explored direct arrangements with foreign-based insurance companies/ hospitals for tie ups and treatments.
Intermediaries and Facilitators Dependance risk	While intermediaries act as gateway to channelise foreign patients, there is a clear financial motive resulting in negligible value add to patients and the providers. If gateways were more transparent, costs of facilitation/ referrals could be beneficially transferred to patients in the form of discounted treatment costs.	On an average hospitals spend about 15-20% of revenues earned from foreign patients as facilitation fee to such intermediaries. Further intensifying competition in this sector and associated risks of patient diversion have eroded some of the benefits traditionally associated with this route. A welcome step in this context has been the launch of HYPERLINK http://www.indiahealthcaretourism.com/ which is a national portal with the ability to educate a prospective patient about medical avenues in India and provides a platform for bringing together the patients and accredited facilities. The platform though very promising, needs to be strengthened further in terms of a monitoring agency for overview and screening, greater degree of empanelments of hospitals, history of clinical outcomes, marketing efforts to promote the website with a national mandate.
Connectivity	Lack of an integrated effort from stakeholders in tourism (airlines, hotels), healthcare (hospitals, doctors), and government. Cost advantage together with better access and connectivity could boost the sector.	Ease of connectivity combined with well developed infrastructure (medical and non medical) in several regions has led to these segments setting up their own diaspora of a floating medical population. Kerala, for example has connectivity to several GCC countries and a possible extension to other corridors such as Africa, S/SE Asia and CIS regions would be beneficial in tapping the large volume of medical patients in these regions who currently travel to multiple destinations outside their home country for availing medical facilities.
Other Broad Areas	**Status**	
Role of the Government Visa, infrastructure Targeting promotion State level schemes	The government has introduced a separate category of medical visa: M-visa which 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. Industry experts indicate that several patients find it easier to seek an ordinary tourist visa instead of the M Visa. A targeted national-level medical tourism promotion exercise which can collectively bring the private healthcare sector on the international medical roadmap. Care should however be taken not to promote public and private infrastructure in the same forum as it can undermine the expected overall "quality" element which is currently associated only with the private sector. While Arogyashree was been a tremendous boost to improving the access to medical facilities for residents of the state of erstwhile Andhra Pradesh, a designated national scheme of Heal in India for foreign patients could also go a long way in promoting the rapidly growing sector	
Overall ease and convenience at the location	The perception of a state/country is governed by a lot of factors: a. Infrastructure in the state (Medical and Non Medical in the form of airways, accommodation, tourism avenues, manpower) b. Ease of Visa - Special treatment or queues for medical visa holders c. Safety and security d. SPOC: Single point of contact for every international patient or set of patients based on complexity e. Affordable hotels/serviced apartments/B&B/home stays and hospitals can come together to create an environment of holistic care. f. Post surgical wellness and home care options g. Quality perception: Increasing the penetration of accreditation – devise means to reduce the cost and time burden usually associated with registrations without compromising on quality.	
Funding and access to capital	In the private sector, PE investments have largely been seen in the large multispecialty hospital chain sector while smaller standalone set ups have been unable to access capital (whether for enhancing the infrastructure, attract high cost talent or obtain quality accreditations). Large hospital chains have secured funding on the back of having quality infrastructure, healthy mix of international patients, positive clinical outcomes and ambience to attract the lucrative foreign patient mix.	
Accreditations	Need to reduce the time and the costs involved with registration and accreditations whether under NABH or JCI without compromising on quality. A graded set of approvals (which are currently existing) can be beneficial for domestic affordability of medical care but can potentially create ambiguity as it is a common evaluation parameter for international patients. A consistent singular approval is a must for attracting the international patient diaspora.	

Lessons from neighboring states and countries

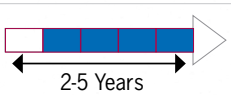
Areas	Example	Case in point
National level promotion	Malaysia, Thailand	Malaysia Healthcare Travel Council (which includes representatives from hospitals, external trade, investment development, tourism) works on strategies and programmes aimed at projecting Malaysian medical tourism. Features for foreign patients include dedicated call centre, careline, offices in Dhaka, Hong Kong (China) and Jakarta, a medical tourism welcome lounge at the airport etc. Thailand also has a similar cluster which involves the collaboration of various government agencies and leading business associations. **In Kerala, it should comprise of representatives from ministry of tourism, wellness, yoga and ayurveda, health, infrastructure apart from other departments like commerce or external affairs as appropriate.**

Impact	Kerala Standing	Timeline target in years
		

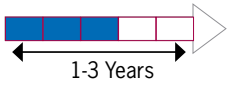
Areas	Example	Case in point
Individual Hospitals Service and Infrastructure excellence	India - Apollo, Thailand - Bumrungrad	Out of the million patients, Bumrungrad hospital treats annually, more than 50% are foreign nationals. Dedicated foreign patient services include medical coordination office, multi language interpreters, multi language website, post return follow ups, local reference offices in several countries, in house accommodation for rent, apart from the regular escorting and support services. **Increase the set up of private infrastructure in the form of medi-cities/centres of excellence with elements of both modern and traditional medicine.**

Impact	Kerala Standing	Timeline target in years
		

Areas	Example	Case in point
Private players alliance	India – A leading chain of hospitals	International patients are faced with challenges relating to accommodation near the hospital, logistics, connectivity within the country. A collaborative effort with the travel, tourism, communications and healthcare industry could go a long way in easing the travel experience for a patient. As an example: a leading operator in India has tied up with a leading international airline, an alliance that enables patients along with their relatives from nearly 20 countries to visit its locations across India at special fares. The same hospital has also tied up with select chains of 5 star hotels to cross synergise. Several travel agencies like Wings, Thomas Cook , IRCTC, and dedicated medical tourism agencies like TransEarth have joined hands to cater to the sector. **Kerala tourism, which already has established tie-ups and relationships with various industries developed over the 20 years post the inception of the "Gods Own Country" campaign can easily be leveraged to extend the same to the medical sector. This is a lesson, the state does not need to learn. It has already mastered it.**

Impact	Kerala Standing	Timeline target in years
		

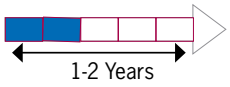
Areas	Example	Case in point
Government Tieups	Several hospitals	Tie ups with various African and GCC governments which help in creating complete channel of medical tourism from lining up patients, organising pre-operative consultations, post operative follow ups and securing the payment mechanism. This has been successfully done in cardiac, orthopaedic and gastro segments.

Impact	Kerala Standing	Timeline target in years
		

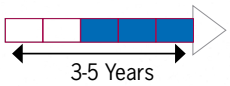
Tapping a globally trained Doctor pool The worlds largest pool of nursing talent	India	India has been the birthplace for a large global pool of qualified doctors who have been practising outside the country would be keen to return to the country if incentivized appropriately and provided the infrastructure and facilities. There are numerous existing examples of centres of excellence being developed in India through overseas trained doctors and which has been one of the primary selling points of medical tourism. Such doctors often bring with themselves a captive patient base from such foreign countries and their goodwill and reputation helps build a brand for the state and country in clinical excellence. Kerala is India's largest base for the most qualified and experienced nurses and is a net exporter of nursing and technician talent.

Impact	Kerala Standing	Timeline target in years
		

Marketing strategy	Malaysia, Turkey, Thailand	Countries like Malaysia, Turkey have followed a destination-driven approach while those such as Singapore have emphasized on clinical excellence. Most countries follow a hybrid of both approaches. It is important to identify the strengths of the state and the potential for clinical excellence should not be mixed up with wellness as target market for both are significantly different – one should help compliment the other. **Follow a hybrid approach to attract medical talent and showcase its abilities based on the solid standing of infrastructure, manpower, clinical outcomes and affordability.**

Impact	Kerala Standing	Timeline target in years
		

Bilateral agreement with Government insurance	Sri Lanka, India	Maldives has entered into agreements with Sri Lanka and very recently with India to expand the coverage of Maldivians under the national health insurance scheme. Agreement also promotes representative local offers and tele medecine set ups to act as feeders

Impact	Kerala Standing	Timeline target in years
		

One State Approach

Leveraging the wellness curve

Conclusion

Tourism in Kerala has come a long way since first introducing the Travel Mart in 2000, wherein the slogan "God's own country" was launched. Its continuous branding efforts has placed the state in the global tourism map. With over half the world's medical tourists flocking to Asia, it is the right time for Kerala to leverage its tourism brand and secure a leading place in the medical tourism market too. While there are several barriers and competitive hurdles that Kerala faces to be able to achieve this goal, major levers to tap would be to play the wellness card and position medical tourism from a one-state approach.

One may argue that the dynamics of medical industry are far too varied to present an unified pitch or that the medical competence of the state would get camouflaged by the wellness brand. There are proven testimonies both within the country and outside which have succeeded with this approach.

Kerala's very own tourism campaign was a One-State approach which brought about a remarkable revival in the tourism sector where all stake holders ranging from luxury 5-star hospitality properties to local travel operators, home-stay operators and wellness facilities benefitted as an ecosystem. Similarly, Thailand which initially was known to be the wellness capital, leveraged its positioning and brand image to extend its health offering to cover advanced modern medical treatments and is a leading global medical tourism player today.

Well poised to achieve the billion dollar mark in medical tourism – Kerala needs a thoughtfully devised strategy to improve the medical infrastructure and marketing, position medical treatment along with wellness, and identify existing and potential target markets in a steadily growing global medical tourism industry.

Interviews

Fr Johnson Vazhappilly CMI
Executive Director & CEO
Rajagiri Hospital

Q. What is your outlook on the scope and potential for medical tourism and the factors driving it in Kerala?

Kerala has immense potential in this segment mainly driven by the following factors:

- There is a growing awareness among various hospitals to opt for national and international accreditation. This trend is prevalent across Kerala hospitals and this is expected to boost the quality of care and clinical standards.
- There has been a substantial increase in the number of quality beds available in Kerala. These new beds are also backed by world class technology, equipment, infrastructure, corporate ambience etc to suit global requirements.
- With improving medical infrastructure and appeal in Kerala, several doctors and associate staff from across the world are keen to grab the opportunity to return to their home town.
- Kerala boasts of a very well-known wellness eco system which acts as an excellent post-surgical rehab destination.

Q. Do you see any competition from neighboring states which have a strong medical reputation?

There is enough room for everybody to grow in this sector in India. There are several factors globally which will continue to increase MVT such as rising costs, lack of facilities in many developed regions such as middle east, negligible insurance in regions like Africa.

Q. What is the need of the hour for Kerala medical tourism?

What Kerala needs is a combined approach. The hospitals in the state see very positive signs both within the state and at a Central level to promote this industry. While there will be complexities in the one state approach, appropriate intervention from the government and representatives from corresponding ministries can ensure a seamless mechanism to promote medical tourism in the state and combine the capabilities of all associated hospitals.

Several Kerala hospitals are planning road shows in Middle East, Africa, to showcase this capability and there is a concerted effort currently to project this to medical value travel regions.

We have selectively reached out to a few hospitals in Kerala to obtain their views and inputs on the topic, excerpts of which are shared in this section. We thank them for extending their time and support.

Dr Harish Pillai
CEO, Aster Medcity & Cluster Head
Aster DM Healthcare

Q. How has the traction for foreign patients been in Aster and what is the driver for MVT?

Despite the fact that Aster has been in operation for only a year with minimal promotion efforts for foreign patients, Aster has already seen several patients flowing in from GCC on their own, and it also has a pipeline established in Africa. Patients are approaching for advanced treatments in oncology, orthopedic, neurology, GI, cardiac and nephrology. Global patients look for world class infrastructure, best in class technology, highly resourceful clinical practice, affordable pricce points. Presence of these in a hospital makes a great value proposition for any MVT pan India

Q. What are the most commonly practiced models to attract foreign patients?

Aster network in west Asian countries is a key advantage to source foreign patients. Currently hospitals are tying up with some of the local hospitals, setting up partnerships, establishing a corridor where people come back to India for advanced treatments. There are challenges associated with facilitators. It is an unregulated market and the structure and the mediation mechanism tends to put the sector and country in poor light.

Q. What is important to promote MVT in Kerala?

It is important to showcase the clinical capability to automatically attract footfalls. There has to be an eco system which is purely clinical outcome based where all facilitators are registered, all the hospitals are strictly accredited and ranked based on clinical outcomes and this shall present the true capability of our hospitals in the global arena.

Q. Role of Government in promoting MVT?

The new healthcare portal brings several hospitals under a single banner. Kerala will benefit from Govt initiatives as it has strong clinical outcomes backed by an enormous and talented human resource pool. Unlike tourism which has been aggressively promoted worldwide, the talent pool and capabilities in Kerala in medical field has not been promoted in a similar fashion.

Q. How will traditional medicine impact modern medicine promotion in Kerala?

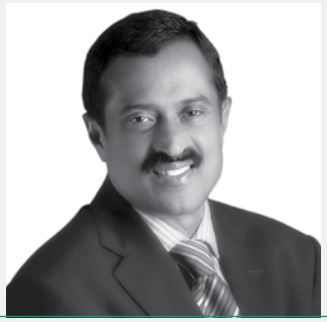
Ayurveda and modern medicine can coexist and they are complimentary branches of medicine. The challenge for advanced Ayurveda treatments is in the lack of standardization, consistent results due to lack of R&D funding for research. Kerala has a huge advantage as only a handful states or countries boasts of strong traditional medicine capabilities.

Q. Any other key observations?

It is important to highlight the issue of social equality while trying to promote medical tourism. There is an incorrect perception that medical tourism is promoted by hospitals at the cost of local patients. It is important to understand that medical tourism can help cross subsidise for social care, it improves service excellence which can benefit one and all.

We have selectively reached out to a few hospitals in Kerala to obtain their views and inputs on the topic, excerpts of which are shared in this section. We thank them for extending their time and support.

Interviews



Mr E. M.Najeeb
Executive Director
KIMS

Q. What is the opportunity for Kerala and the perceived threat from neighboring states?

Following Singapore, Malaysia, Thailand, India is going to be the main hub for medical tourism in the next few years. Kerala has over 20 hospitals accredited by NABH & ACHI of which three are Government hospitals. With the need for accreditation and demand for quality practices, Kerala will soon have more than fifty hospitals that are accredited by NABH and ACHI thus becoming a main destination for medical treatment in India. The Ministry of Commerce and FIEO are supporting and promoting medical tourism and Kerala has the unique advantage of having better tourism opportunities and resources when compared to other states. Neighboring states do not pose an immediate competition to Kerala for medical tourism as Kerala is already an established tourist destination and known for quality and traditional Ayurvedic treatments. One of the main sources of revenue for the state is through medical tourism and the government has taken various initiatives to promote the state as a preferred destination. Kerala also has the advantage of having specialized and well qualified doctors, trained nurses and paramedical staff with a very good doctor to nurse ratio. If the complimentary nature of Ayurvedic treatments an be projected with Allopathic treatments, better traction can be expected.

Q. Role of government to promote medical tourism in Kerala

Government is still to recognize and take active steps to promote medical tourism as an industry. As the first step, the government should form a committee comprising of representatives from accredited hospitals and officials from health and tourism departments. Further to this the Government should allocate a 'Marketing Fund' that may be used for advertising Kerala Medical Tourism and participating in international fairs and exhibitions to promote and create awareness for medical tourism. Thus the facilities and expertise of Kerala can be promoted internationally making it a Medical Value Hub.

KTM – Kerala Travel Mart is an association of Travel agents/tour operators/ Hotels which together host an exhibition every two years to promote tourism in Kerala. Similar to this there should be a society with all NABH approved or accredited hospitals as members for promoting medical tourism. This society can play a pivotal role in taking the initiative forward. Referral organizations from other countries can then visit Kerala for B 2 B discussion with hospitals in Kerala.

Q. Any other thoughts

The aim is to attract more medical tourists from Europe and other Western countries. This can be achieved and is possible if the international insurance companies approve accredited hospitals for reimbursements. Quality and unified effort to market and position is key. Having said this, while Kerala is well poised to tap this market, the work culture, attitude and behavior skills of its people and healthcare professionals needs to improve for better positioning the state as a medical tourism hub alongside global hubs such as Thailand, Singapore etc.

We have selectively reached out to a few hospitals in Kerala to obtain their views and inputs on the topic, excerpts of which are shared in this section. We thank them for extending their time and support.

Dr. A Marthanda Pillai
Managing Director,
Ananthapuri Hospitals and Research Institute

Q. What are the key challenges in MVT and what is key to promote MVT in Kerala?

There is a lack of coordinated action to brand and project the place as a world-class healthcare destination. We need a permanent platform wherein the efforts to promote MVT can be done on a sustained basis. Besides coordination, it has to focus on benchmarking of hospitals, advice on legal issues and promoting insurance-based care. Apart from local efforts, there should be more engagement from Indian Consulates in the Gulf countries to promote MVT. Currently, the sector is disorganised. Chances of middle men intervening and exploiting the situation are high. To avoid this, there should be a permanent facility in every Consulate to guide those who are seeking healthcare services in India. The State Government should act as a facilitator and policies on healthcare should be inclusive in nature. The Government should take the private sector into confidence. Firstly, we need to ensure optimum utilisation of diagnostic services both in public as well as private institutions. Through a systematic process, the Government should empanel private hospitals and make the rates uniform. Otherwise, the expenses for quality and specialised treatment will remain on the higher side affecting the public at large..

We have selectively reached out to a few hospitals in Kerala to obtain their views and inputs on the topic, excerpts of which are shared in this section. We thank them for extending their time and support.

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Appendix – India Healthcare Statistics

Major Indicators	India	US	China	Brazil	Global
Healthcare spend as a % of GDP	3.8	17	5.4	9.5	8.6
Per Capita Healthcare expenditure – USD	58	8,848	322	1,078	1,025
Public Spending on Health as a % of total Govt spending	4.3	20	12.5	7.9	14.1
Public Spending on Health as a % of total Healthcare spending	30.5	47	56	47.5	57.6
Out of pocket health expenditure as a % of private health spend	87.2	22.4	78	57.8	52.6

Source: WHO 2015

Major Infrastructure Indicators	India	US	China	Brazil	Global
Beds per 1000 population	0.7	3.8	2.3	2.9	2.7
Doctors per 10000 population	7	14.9	18.9	24.5	13.9
Nurses per 10000 population	17.1	16.6	76	NA	28.6
Dentists per 10000 populaiton	1	NA	12.2	-	2.8

Source: WHO 2015

Appendix – State level Key Healthcare Indicators

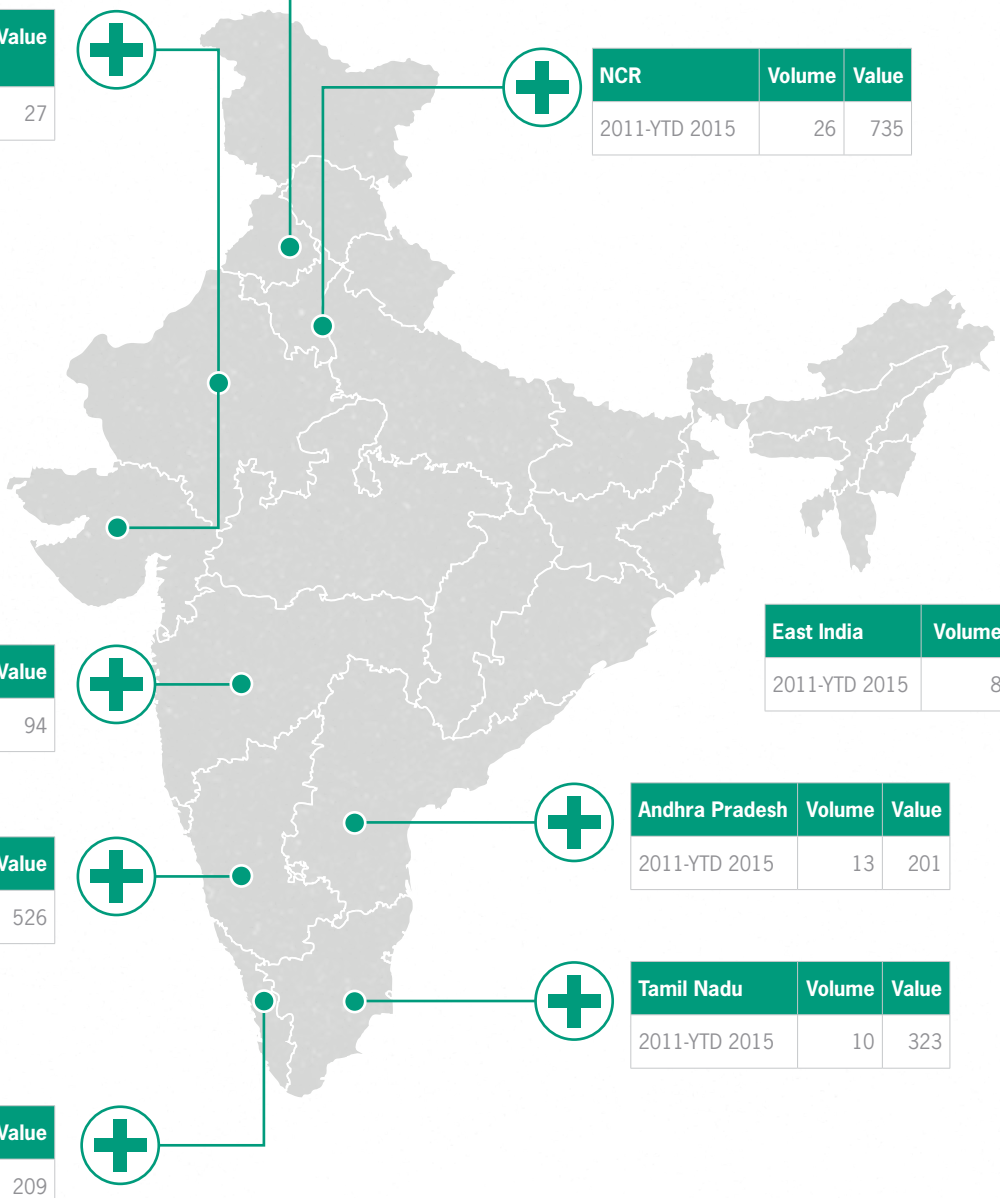
Number of doctors possessing recognised medical qualifications, registered with state medical councils/Medical council of India

S No	State/UT	Total Up to 2014
1	Andhra Pradesh	70,799
2	Arunachall Pradesh	510
3	Assam	20,886
4	Bihar	38,260
5	Chhattisgargh	5,745
6	Delhi	10,932
7	Goa	3,215
8	Gujarat	53,376
9	Haryana	5,717
10	Himachal Pradesh	2,035
11	Jammu & Kashmir	13,006
12	Jharkhand	4,418
13	Karanatka	1,01,273
14	Madhya Pradesh	30,890
15	Maharashtra	1,48,575
16	MCI	52,666
17	Odisha	19,188
18	Punjab	42,013
19	Rajasthan	34,139
20	Sikkim	824
21	Tamil Nadu	1,02,328
22	Kerala	44,515
23	Uttar Pradesh	65,343
24	Uttarakhand	4,425
25	West Bengal	63,783
	Total	**9,38,861**

Number of government beds in Rural and Urban including CHCs - 2014

S No	State/UT	Average Population Served per Govt. Hospital bed
1	India	1,833
2	Andhra Pradesh	4,381
3	Arunachal Pradesh	555
4	Assam	2,369
5	Bihar	8,789
6	Chhttisgarh	2,101
7	Goa	614
8	Gujarat	2,196
9	Haryana	3,481
10	Himachal Pradesh	795
11	Jammu & Kashmir	1,245
12	Jharkhand	6,052
13	Karnataka	1,154
14	Kerala	918
15	Madhya Pradesh	2,683
16	Maharashtra	715
17	Manipur	1,776
18	Meghalaya	867
19	Mizoram	638
20	Nagaland	959
21	Odisha	2,505
22	Punjab	2,420
23	Rajasthan	1,521
24	Sikkim	406
25	Tamil Nadu	1,069
26	Tripura	904
27	Uttar Pradesh	N/A
28	Uttarakhand	1,301
29	West Bengal	1,170
30	A&N Islands	495
31	Chandigarh	2,359
32	D&N Haveli	1,080
33	Daman & Diu	1,523
34	Delhi	824
35	Lakshadweep	261
36	Puducherry	481

Appendix – Region wise PE/VC investments in healthcare delivery



Punjab	Volume	Value
2011-YTD 2015	1	12

Gujrat and Rajasthan	Volume	Value
2011-YTD 2015	6	27

NCR	Volume	Value
2011-YTD 2015	26	735

East India	Volume	Value
2011-YTD 2015	8	62

Maharashtra	Volume	Value
2011-YTD 2015	19	94

Andhra Pradesh	Volume	Value
2011-YTD 2015	13	201

Karnataka	Volume	Value
2011-YTD 2015	28	526

Tamil Nadu	Volume	Value
2011-YTD 2015	10	323

Kerala	Volume	Value
2011-YTD 2015	5	209

Value in US$ million

Leading PE investments in healthcare delivery in India 2014-15

Investor	Investee	City	Pegged Amt - US$mn
TPG Capital	Manipal Health Enterprises Private Limited.	Bangalore	150
Temasek	Medanta(Global Health Pvt Ltd)	Gurgaon	105
Olympus Capital and India Value Fund Advisors (IVFA)	Aster DM Healthcare	Kerala	60
CDC Group	Narayana Hrudayalaya Hospitals	Bangalore	48
ICICI Venture	Krishna Institute of Medical Sciences Limited	Hyderabad	36
OrbiMed	Bluesapphire Healthcares Pvt Ltd	Faridabad	20
The Japan Bank for International Cooperation	Takshasila Hospitals Operating Pvt Ltd	Bangalore	10
Fidelity Growth Partners India and Somerset Indus Capital	Cygnus Medicare	Delhi	10
International Finance Corporation, Nexus Venture Partners and Helion Venture Partners	Eye - Q	Delhi	10
Fidelity Growth Partners India (FGPI) and Fidelity Biosciences	Medwell Ventures Pvt. Ltd	Bangalore	10

Appendix – Share of MTA

International tourist arrival by state for medical	% SHARE in 2014
Tamil Nadu	~40-50%
Maharashtra	~15-20%
NCR	~15-20%
Kerala	~5-7%
Karnataka, Hyderabad	~5-10%

Source: Ministry of tourism, GT Analysis

Appendix – Kerala Demography

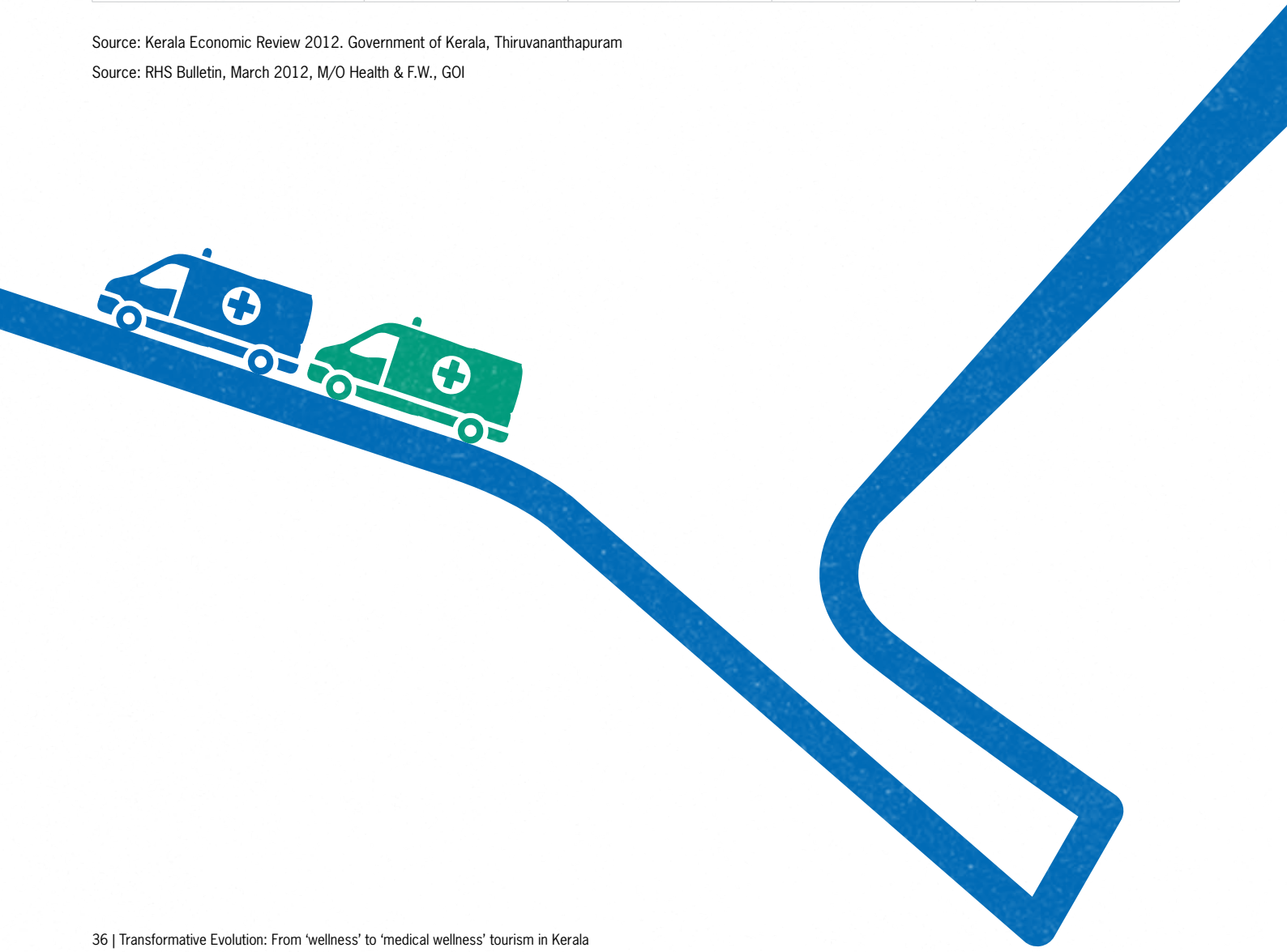
Indicator	Kerala	India
Total population (In Crores) (Census 2011)	3.3	121.0
Decadal Growth (%) (Census 2001)	4.9	17.6
Infant Mortality rate (SRS 2011)	12.0	44.0
Maternal Mortality Rate (SRS 2007-09)	81.0	212.0
Total Fertility Rate (SRS 2011)	1.8	2.4
Crude Birth Rate (SRS 2011)	15.2	21.8
Crude Death Rate (SRS 2011)	7.0	7.1
Natural Growth Rate (SRS 2011)	8.2	14.7
Sex Ratio (Census 2011)	1,084	940
Child Sex Ratio (Census 2011)	959	914
Schedule Caste Population (In Crores) (Census 2001)	0.31	16.6
Schedule Tribe Population (In Crores) (Census 2001)	0.03	8.4
Total Literacy Rate (%) (Census 2011)	93.9	74.0
Male Literacy Rate (%) (Census 2011)	96.0	82.1
Female Literacy Rate (%) (Census 2011)	91.9	65.5

Appendix – Kerala Healthcare

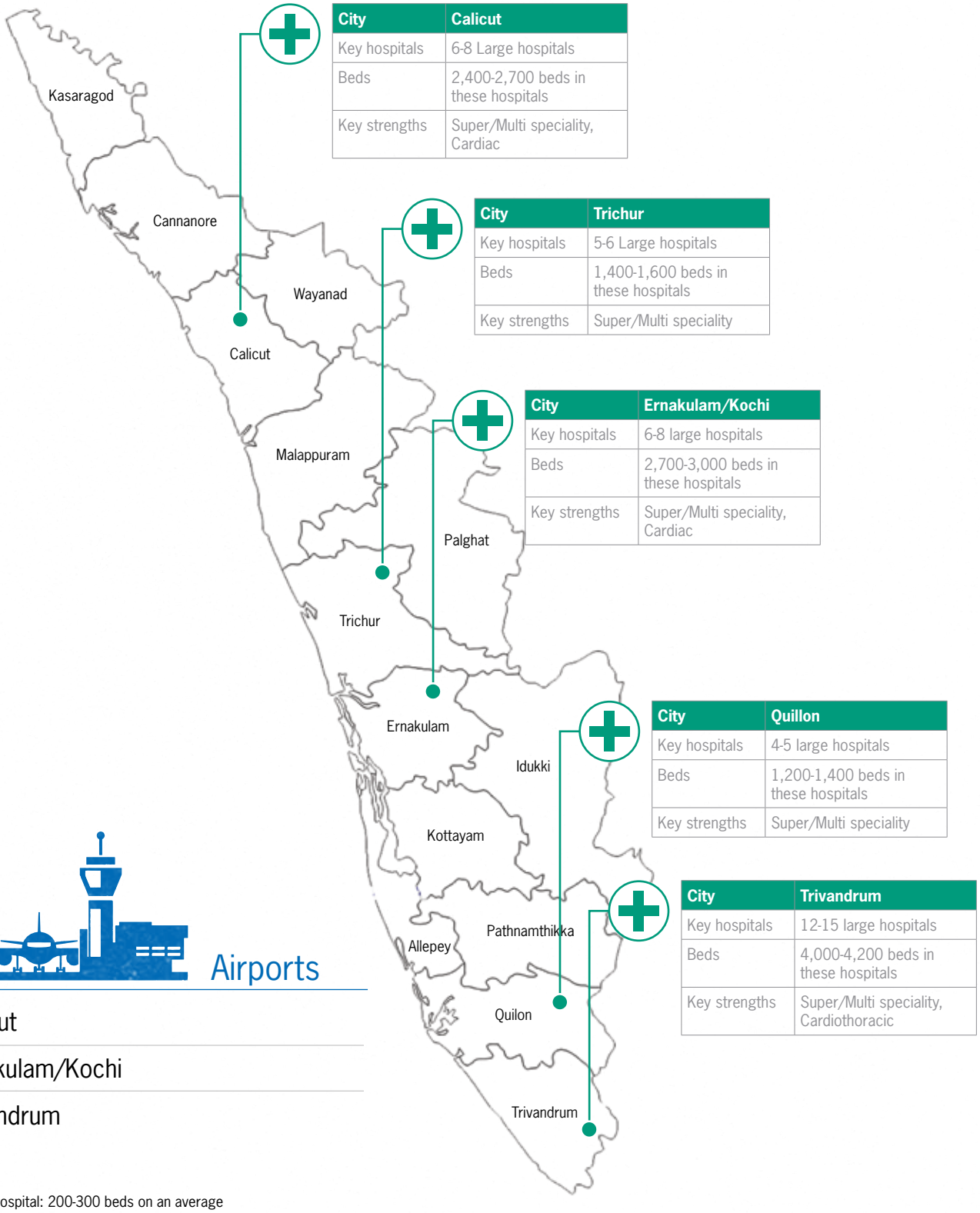
	Number of Institution		Number of beds		Number of Doctors		Number of nurses	
	Public	**Private**	**Public**	**Private**	**Public**	**Private**	**Public**	**Private**
Allopathy	1,278	4,825	43,616	57,071	5,273	15,281	14,257	19,125
Ayurveda	857	4,332	3,920	5,502	1,054	5,986		1,598
Homeopathy	561	3,226	1,295	813	607	3,684		463
Others		535		1,105		447		138
Total		15,614		1,13,235		32,322		40,713
Total per 10000 population		4.8		34.6		9.9		12.4

Source: Kerala Economic Review 2012. Government of Kerala, Thiruvananthapuram

Source: RHS Bulletin, March 2012, M/O Health & F.W., GOI



Appendix – Hospital infrastructure in Kerala



City	Calicut
Key hospitals	6-8 Large hospitals
Beds	2,400-2,700 beds in these hospitals
Key strengths	Super/Multi speciality, Cardiac

City	Trichur
Key hospitals	5-6 Large hospitals
Beds	1,400-1,600 beds in these hospitals
Key strengths	Super/Multi speciality

City	Ernakulam/Kochi
Key hospitals	6-8 large hospitals
Beds	2,700-3,000 beds in these hospitals
Key strengths	Super/Multi speciality, Cardiac

City	Quillon
Key hospitals	4-5 large hospitals
Beds	1,200-1,400 beds in these hospitals
Key strengths	Super/Multi speciality

City	Trivandrum
Key hospitals	12-15 large hospitals
Beds	4,000-4,200 beds in these hospitals
Key strengths	Super/Multi speciality, Cardiothoracic

Airports

Calicut

Ernakulam/Kochi

Trivandrum

*Large hospital: 200-300 beds on an average

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Acronyms and Abbreviations

Acronyms			
WHO	World Health Organization	KA	Karnataka
GDP	Gross Domestic Product	TN	Tamil Nadu
US	United States (of America)	GJ	Gujarat
JCI	Joint Commission International	KL	Kerala
NABH	National Accreditation Board for Hospitals	PJ	Punjab
APAC region	Asia-Pacific region	RJ	Rajasthan
EMEA	Europe, the Middle East, and Africa	WB	West Bengal
CAGR	Compound Annual Growth Rate	OR	Orissa
GCC	Gulf Cooperation Council	FTA	Foreign Tourist Arrivals
CIS	Commonwealth of Independent States	IMR	Infant Mortality Rate
MTA	Medical Tourism Arrivals	MMR	Maternal Mortality Rate
EU	Europe	B&B	Bed & Breakfast
MoUs	Memorandum of Understanding	PE	Private Equity
OPD	Out Patient Department	R&D	Research & Development
IPD	In Patient Department	VC	Venture Capital
MVT	Medical Value Travel	YTD	Year To Date
USD	United States Dollars	SRS	Simple Random Sampling
NCR	National Capital Region	FY	Fiscal Year
AP	Andhra Pradesh	UT	Union Territory
MH	Maharashtra	CHC	Community Health Centre
ACHS	Australian Council on Healthcare Standards		

Abbreviations			
Ltd.	Limited	Govt.	Government
Amt.	Amount	bn	Billion(s)
mn	Million(s)	c.	Circa

Credits

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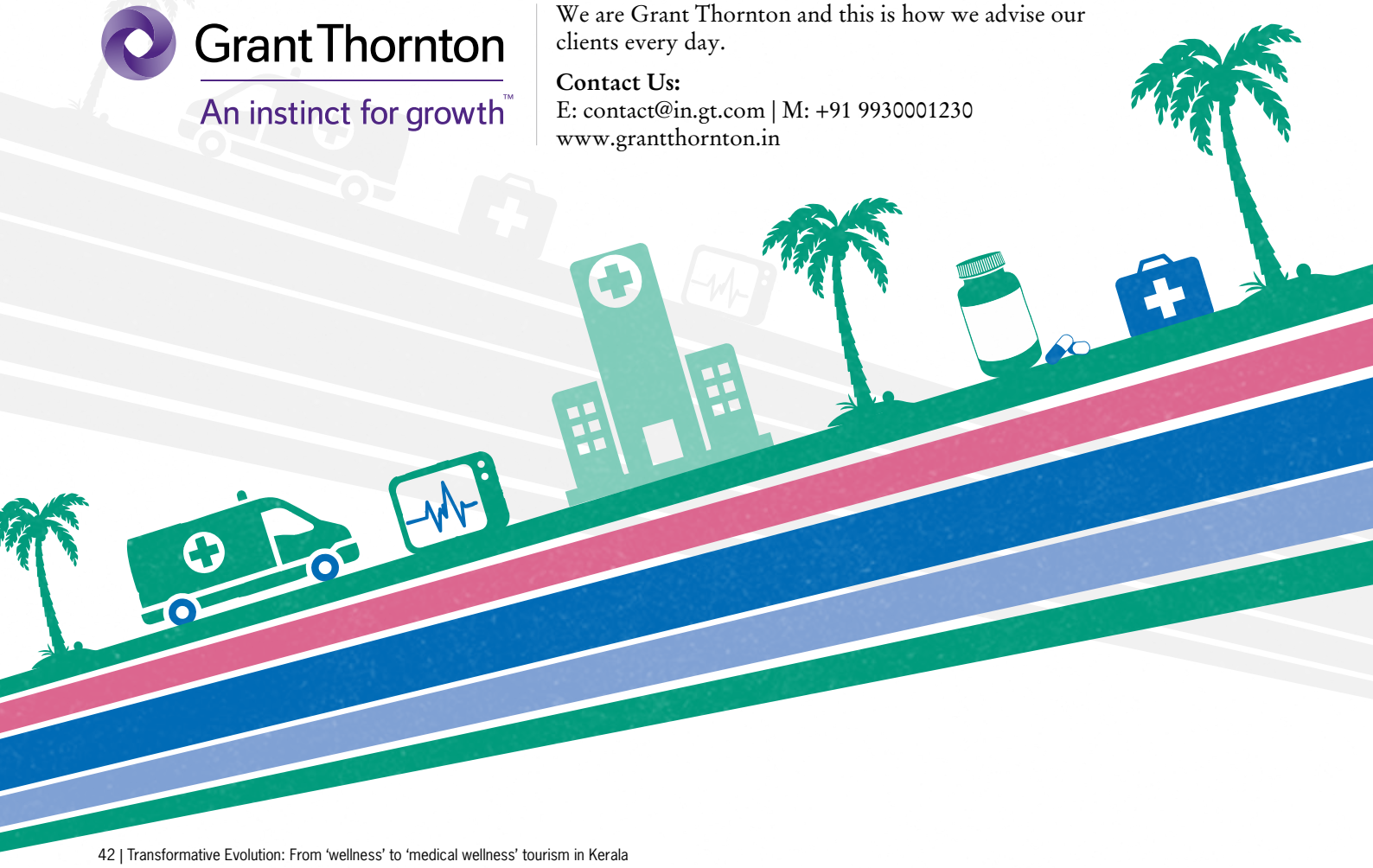

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