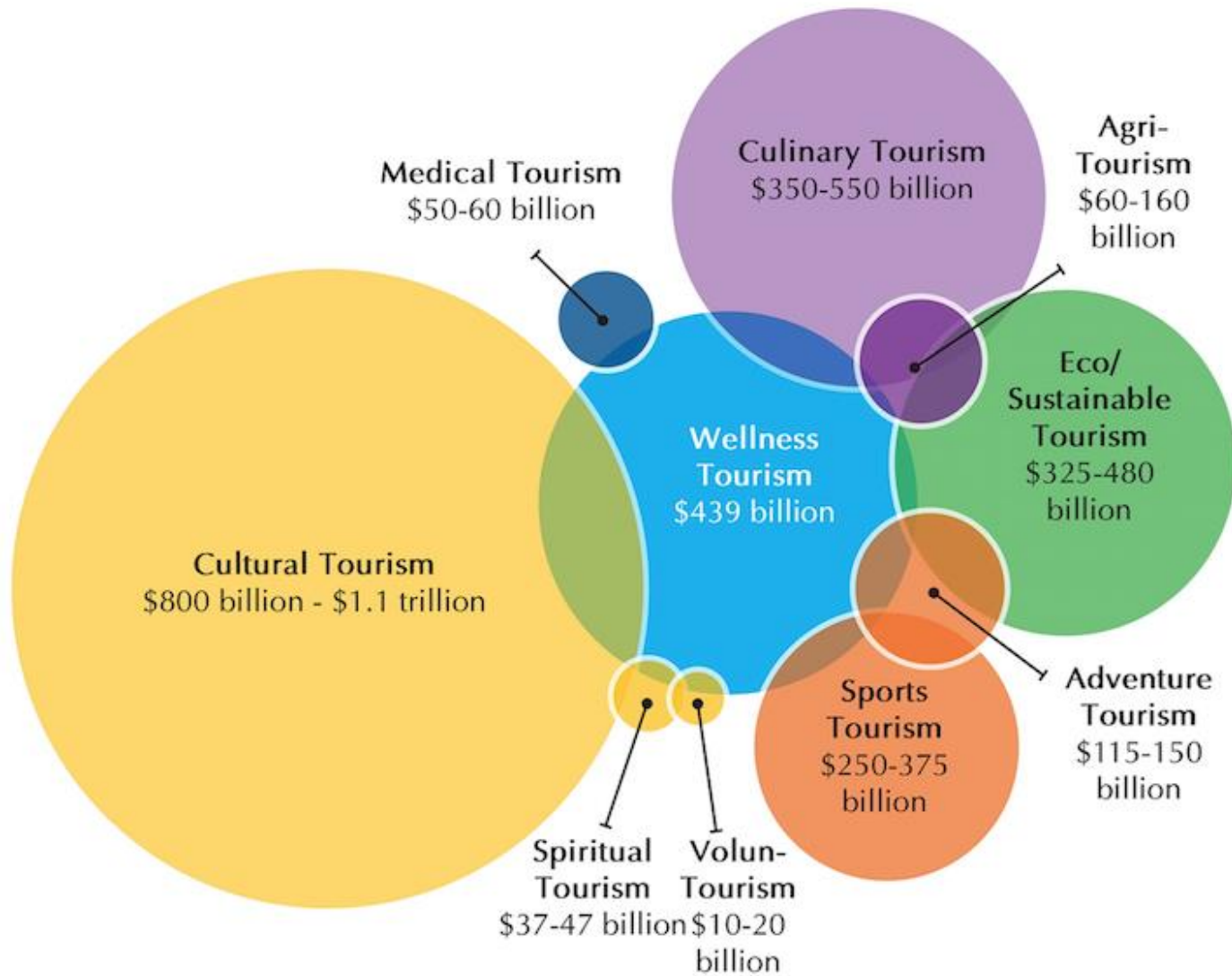




Medical Tourism

Mario Skugor MD
Endocrinology
Cleveland Clinic





GLOBAL MEDICAL TOURISM MARKET

OPPORTUNITIES AND FORECASTS, 2017 -2023



Global Medical Tourism Market is expected to reach **\$165,345 million** by 2023.

Growing at a **CAGR of 15.0%** (2017-2023)

GLOBAL MEDICAL TOURISM MARKET BY GEOGRAPHY

● NORTH AMERICA

● EUROPE



● LAMEA

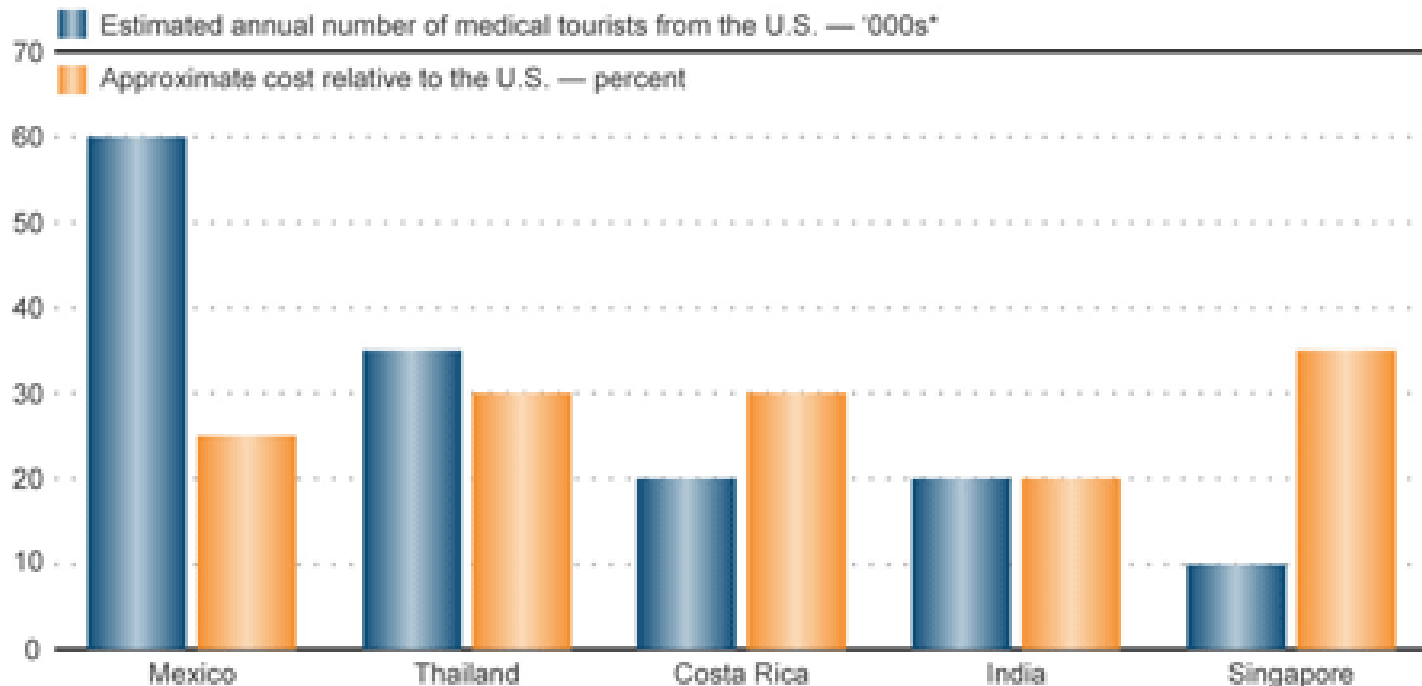
● ASIA-PACIFIC

Asia-Pacific region would exhibit an highest **CAGR of 15.6%** during 2017-2023

COST COMPARISONS

Medical tourism by country

Five of the countries visited most often for medical treatment

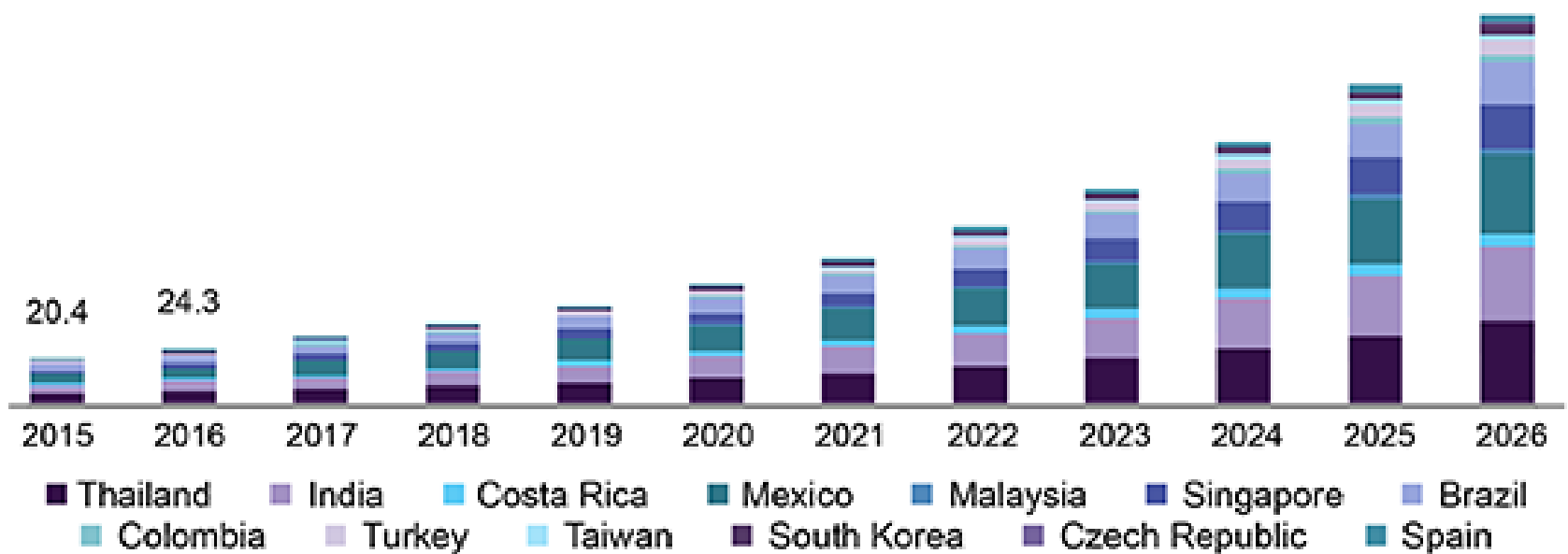


* Estimates are rough; most patients are not tracked
Sources: Deloitte, Josef Woodman (consultant and author of *Patients Without Borders*)



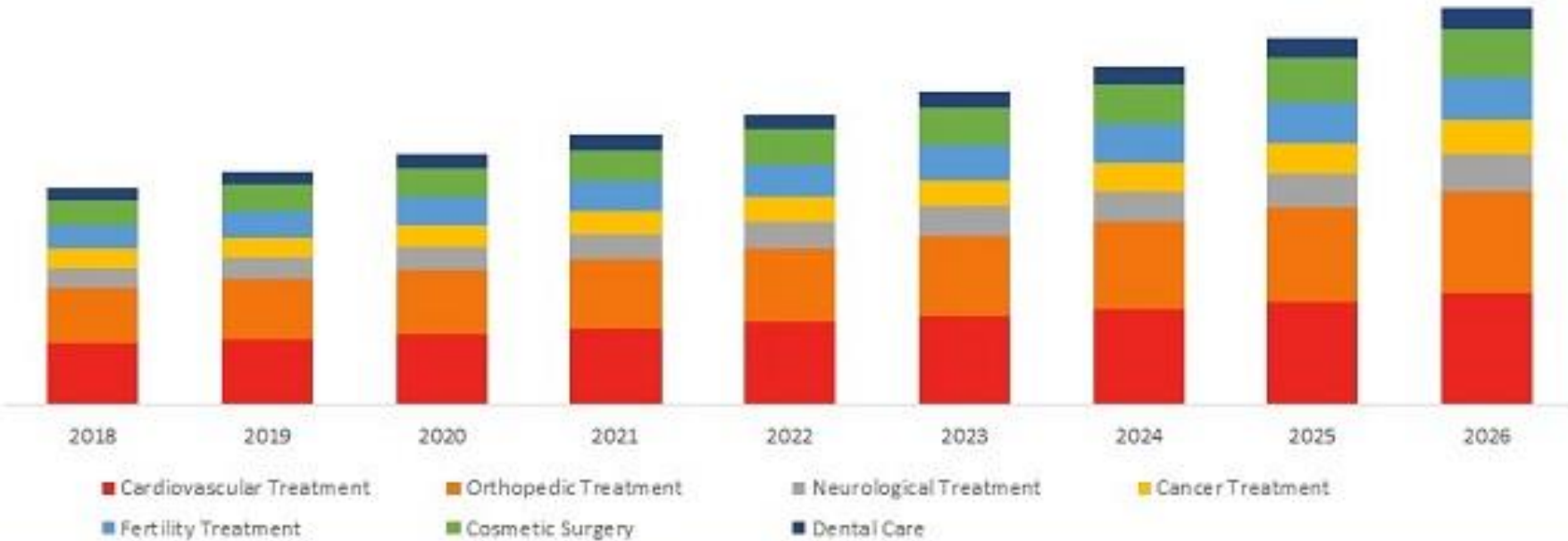
Reuters graphic/Stephen Culp

Global medical tourism market size, by country, 2015 - 2026 (USD Billion)



Source: www.grandviewresearch.com

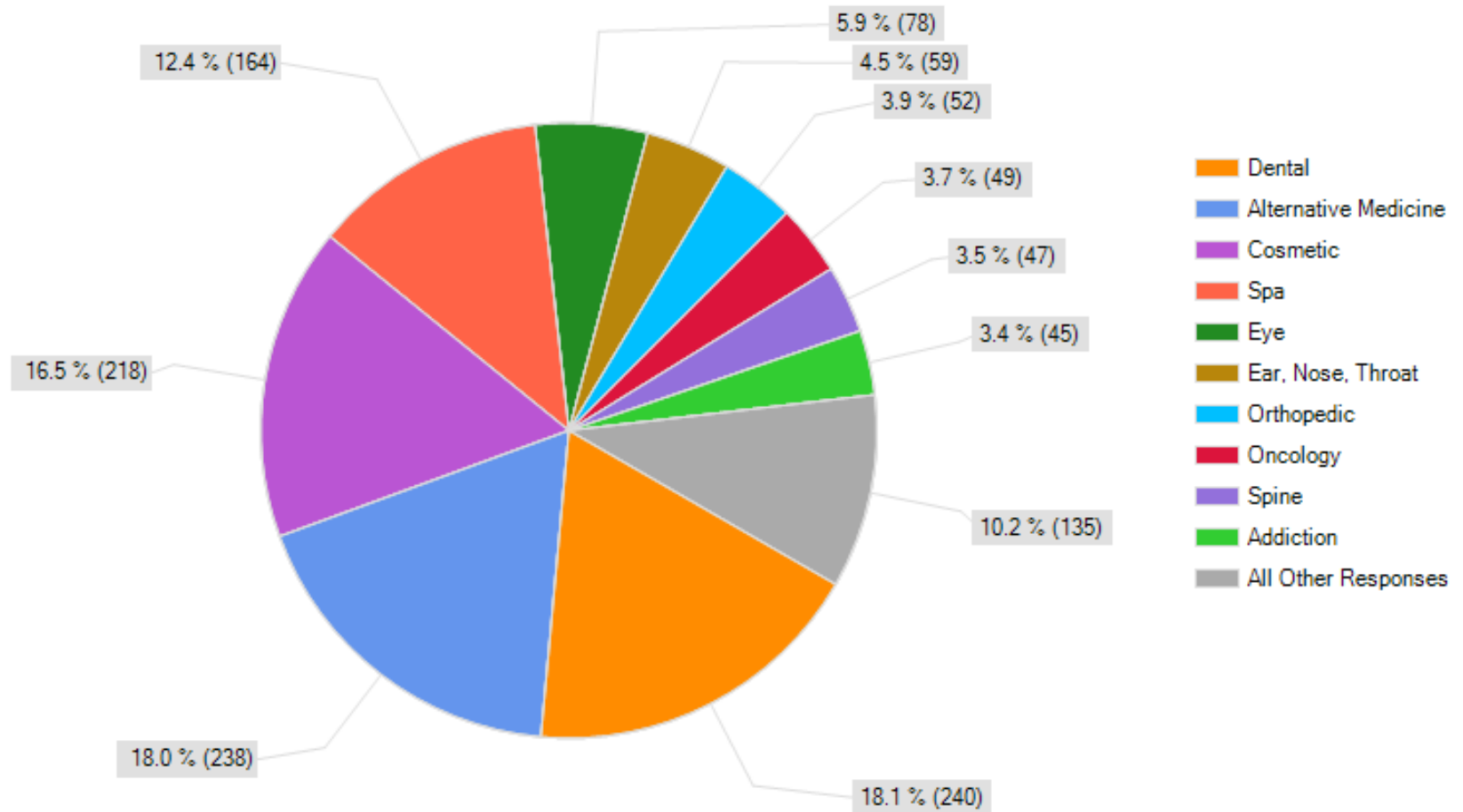
Global Medical Tourism Market By Speciality, Revenue Split (2018-2026)



Source: GMI Research Analysis



If you travel abroad for medical treatment, what type of treatment are you primarily interested in receiving (please select only one answer)?



Other common reasons for health travel

- Infertility
- Elective surgeries
 - Long waiting lists in some countries
- Transplantation

Trends in Medical tourism

- Diversification of the procedures (including wellness)
- Private sector is leading the charge
- Growing number of countries participating
- Commercial pregnancy surrogacy

American Medical Tourists

- In 2007, it is estimated that 750,000 Americans traveled to other countries for health care.
- In 2017, more than 1.4 million Americans sought health care in a variety of countries around the world.

Arch Surg. 2011;146:107–112.

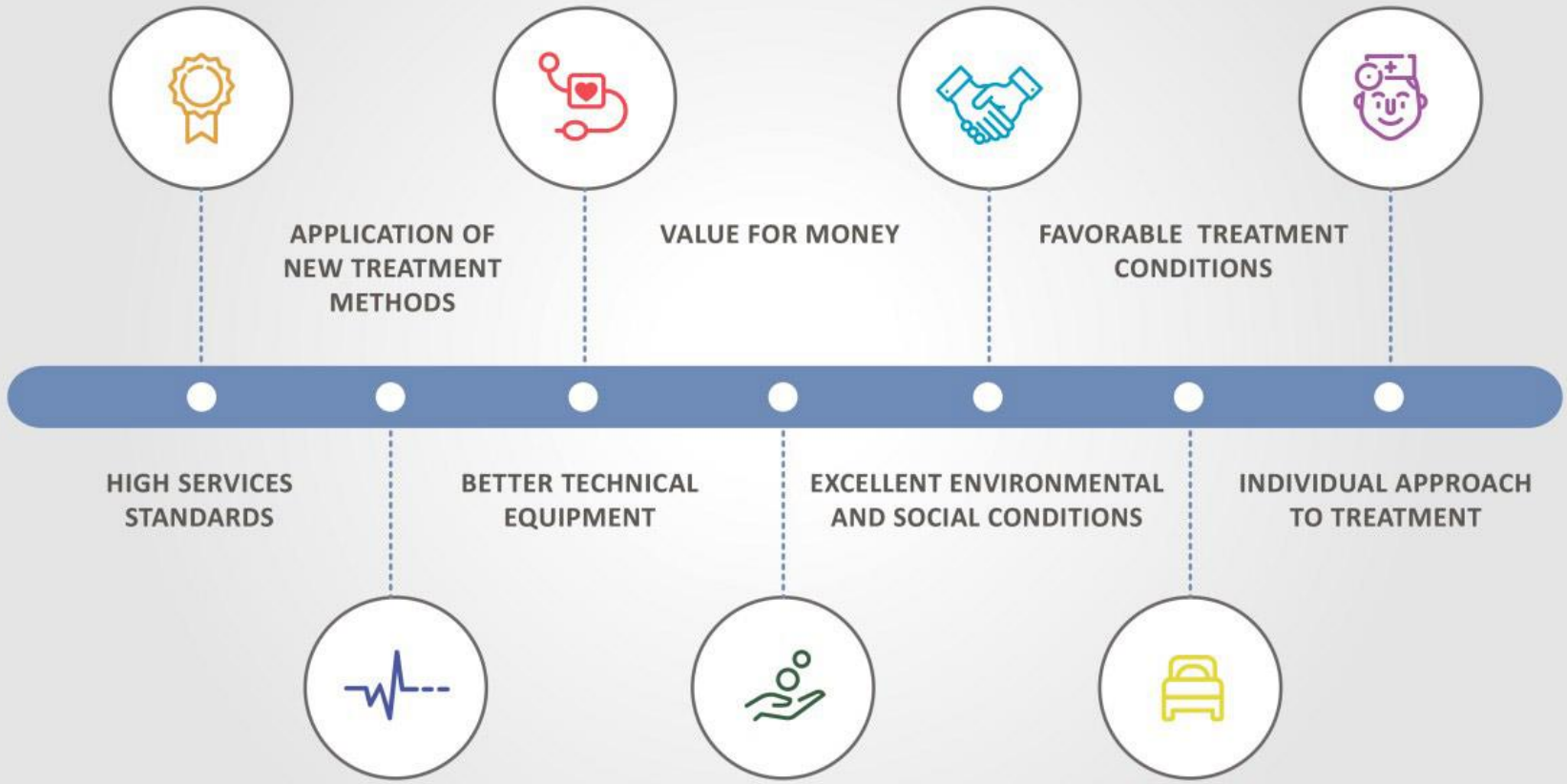
Why do countries favor medical tourism?

- Money!
 - Boost tourism revenues
 - Generate foreign exchange
 - Increase gross domestic product
- Improve medical services
 - Upgrade services / resources available to citizens
 - Stem ‘brain drain’ to other countries

Why do patients want medical tourism?

- Lower cost
- Timely access
- Access to innovative procedures
- Exotic locations and travel 'mystique'
- Privacy – particularly for some cosmetic procedures

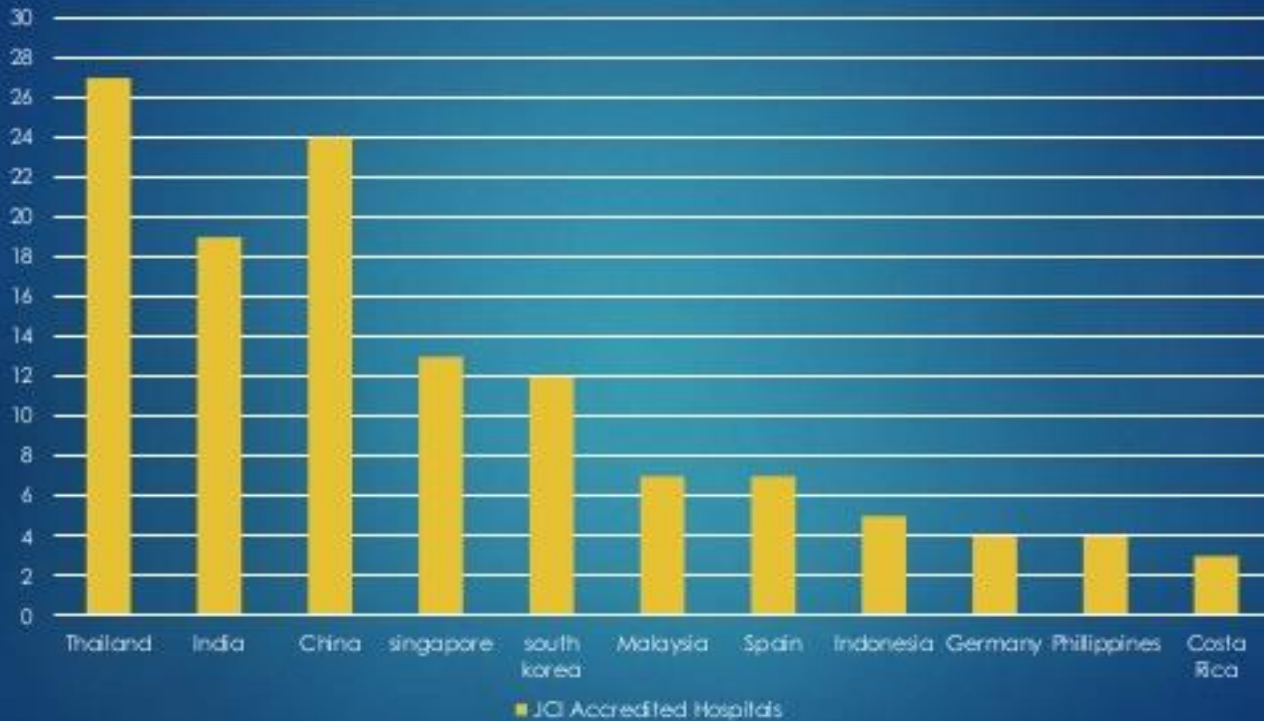
WHY DO PATIENTS CHOOSE TREATMENT ABROAD



Other drivers

- Rapidly improving technology and standards of care in some countries.
 - Singapore offers minimally invasive CABG surgeries
- Proven safety in some countries
- UK, USA and Australian certified specialists practicing in these locations
- Ability to incorporate local therapies

JCI Accredited Hospitals



2013

Potential Issues

- Clinical / Medical
- Financial
- Ethical
- Legal



Clinical Decision Making

- How does the ‘**commoditization of care**’ affect clinical decision making?
 - Potential predisposition to recommend surgical / more complex procedures over conservative Rx
 - Potential of minimizing risks to avoid “losing a client”
 - Potential risk of focus on visible signs of quality / luxury over medical quality assurance

 - Are patients overly optimistic about potential benefits, and under-informed / inadequately aware of potential risks?
 - Once patients have paid a broker fee, are they pre-disposed to opt for surgery even if this is not the most appropriate care?

Other Clinical concerns

- Are innovative techniques evidence based?
- Are providers properly trained and accredited?
- Are medical quality standards comparable to home?
 - Complication rates? – late complication rates usually unknown
 - Infection control / MDR pathogens
- Exposure to exotic / opportunistic pathogens

Ethical issues

- Islands of excellence in a sea of medical neglect
- Infrastructure priorities may be focused on industry rather than local needs
- Infrastructure costs may be passed on to local population in form of increased taxes or reduced services
- Emphasis on high tech care at the expense of “appropriate technology”
- Brain drain from public to private sector
- Special issues pertaining to transplant tourism

Financial / Resource issues

- Potential 'plus' for uninsured patients / procedures
- Potential undesirable results
 - Cost of complications is carried by home country
 - Impact on local resources if outsourcing becomes a major source of care
 - Potential for decreased access to specialized services
 - Decreased training resources
 - Development of transplant programs stunted in countries where transplant tourism is a major method of obtaining transplantation
 - Coercive use of medical tourism by insurance companies
 - Potential shortage of nurses / physicians if foreign trained professionals remain in their country of origin

Legal Issues – Medical standards

- Countries protect against substandard care by:
 - Professional licensing & credentialing
 - Institutional policies
 - Legal remedies
- Care provided in other countries may not meet legal standards
 - Disclosure of risks, benefits, alternatives
 - Certification of professionals training, expertise
 - Access to legal remedies
 - Limitations of liability awards

Legal Issues – Liability

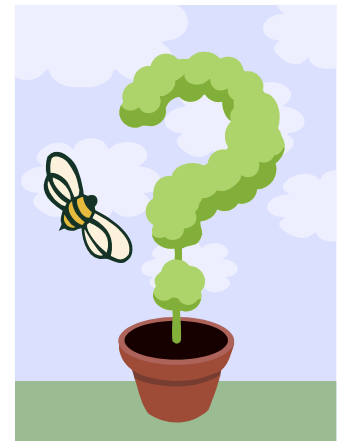
- Brokers require clients to sign waivers absolving them of any liability for medical negligence, substandard care....
- Clients may be unable to bring a case against care providers in the courts
- Recourse to legal remedy in country of care is variable & complex

Legal Issues - Transplantation

- In some countries it is illegal to:
 - Sell / Buy organs for transplant
 - India / Pakistan
 - South Africa
 - Provide transplants to foreigners
 - China
 - To enter the country (as a foreigner) for the purpose of obtaining an organ donation

What actually happens?

- Does medical tourism raise the quality of care and accessibility to care for the local population?
- Does medical tourism widen the gap between rich and poor and decrease access to care for the local population?
- Both are possible.....



Thailand

- Private health care in Bangkok has more
 - Gamma knife
 - Mamography services
 - CT scans

..... than all of England!



- Does that translate into improved access for local Thais?

Bumrumgrad Hospital - Bangkok

- 554 beds, 2,600 staff
- International patients from 150 countries
- Foreign patients ~50% clientele
- First hospital in Asia to receive JCI accreditation
- Provides services in 26 languages
- Expansion plans in other Asian and Middle Eastern countries

India

- Medical tourism is a key industry
 - Government subsidies, fiscal incentives and tax breaks
- 2003: Finance minister called for India to become a “global health destination”
 - Promoted measures to improve infrastructure to support the industry
 - Ministry of tourism promotes 45 “centers of excellence”: cardiac surgery, minimally invasive surgery, oncology, orthopedics and joint replacement, and holistic care

The context of medical tourism in India

- Great divide between facilities focusing on medical tourism and those providing health care to the average Indian
- “The potential for health tourism to translate into benefits for the local population seems to be limited to increasing the wealth of the rich and has done little to improve health care for the average Indian.”

– Bulletin of the World Health Organization. March 2007, 85 (3) 164-165

The context of medical tourism in India

- WHO – 2003 data: health expenditure
 - Private expenditure – 75% of total
 - Public expenditure – 25% of total
 - Addressed health needs of the majority of India's population
 - Health care facilities serving the Indian poor
 - <50% have a labour room or laboratory
 - <20% have a phone line
 - <33% adequately stocked with essential drugs
 - Shortages of physicians and other health care workers
 - Corruption and lack of funds

Medical Tourism in Canada

- 15 medical tourism companies
 - 1 each in Manitoba and Alberta
 - 3 each in Ontario and Quebec
 - 7 in British Columbia
 - And other agencies providing medical tourism services in addition to traditional travel services
- Clients are sent to a wide range of countries:
 - Argentina, Brazil, China, Costa Rica, Cuba, France, Germany, India, Malaysia, Mexico, Pakistan, Poland, Russia, Singapore, South Africa, Sri Lanka, Thailand, Tunisia, Turkey, UAE, US

Medical Tourism

- Brokers / Medical Tourism agencies
 - Middlemen
 - Find hospitals, physicians
 - Arrange transfer of information
 - Buy tickets / arrange flights
 - Reserve hotels
 - Arrange sightseeing
 - Do not verify credentials or licensing of facilities or physicians
 - Make money from hotel commissions and kickbacks
 - No licensing requirements for brokers and agencies
 - Early developments in USA for licensing

Tissue and Organ Transplantation

- WHO estimates that 10% transplants worldwide involve developed world recipients travelling to resource limited countries to purchase organs
- Why?
 - Wait times due to organ shortages
 - Eligibility – patients declined for transplant in home country are often readily accepted for transplant in a for profit system
 - Non evidenced based transplants
 - Fetal tissue / cell transplants
 - Accessibility / cost

Ethical issues – transplant tourism

- Source of transplanted organs
 - Potential for coerced organ ‘donation’
 - Involuntary donations – executed prisoners, kidnappings
- Transplant flow is overwhelmingly....
 - South to north
 - Female to male
 - Black / brown to white
 - Poor to financially secure
- Association with organized crime
 - India, Brazil and other areas

Recipient Risks

- Poor donor recipient matching → intense immune suppression exposes recipients to increased risks...
 - Increased risk of rejection
 - Increased risk of infection
 - Increased cancer risk
 - Increased risk of graft failure
 - Due to rejection, drug toxicity, infection

Compared to Canadian Transplants....

- Inferior graft survival at 3 years
 - 98% biologically related donors
 - 86% emotionally related donors
 - 62% transplanted abroad
- Patient survival at 3 years
 - 100% for those transplanted in Canada
 - 82% for transplant tourists

Stem cell transplants - China

- Tiantan Puhua Stem Cell Centre
 - Applies stem cell treatments to a wide range of neurologic disorders
 - Stroke, Parkinson's, cerebral palsy, hereditary degenerative conditions
 - Unique stem cell treatments
 - Self stem cell activation and proliferation program
 - Stem cell delivery by lumbar puncture or stereotactically
 - Use of autologous bone marrow stem cells (to boost the immune system) and fetal stem cells in combination
 - Claim a “high level of recovery”

Efficacy?

- There is no any double blind, placebo controlled trials showing benefit and safety of stem cell transplants...”
- Improvements often slight / transient
 - “come back for another treatment cycle”
- Long term follow-up is very limited
 - “patients don’t have time to wait”
- Treatments accompanied by intensive physiotherapy / occupational therapy / massage / acupuncture / Chinese traditional therapy to:
 - promote improved mobility and function
 - stimulate the new cells into becoming functional
 - helps the cells migrate into the correct area

Bottom line

- Medical tourism is a reality... and a growth industry
- Both risks and benefits exist
- Difficult to determine the extent of risks
- Quality of care is variable
 - Buyer beware
- Many ethical issues

Keys to success

- Quality of service
- Ease of organization
 - Estimates
 - Travel
 - Lodging
 - Appointments
 - Billing
 - Communication
- Simple and understandable pricing
- Attractive location

CLEVELAND CLINIC



INTERNATIONAL PATIENTS WHO VISIT MAIN CAMPUS



3,123

unique international
patients at main campus

