

# Trade in Health Services and Medical Tourism



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# Motivation

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- Malaysia, Singapore and Thailand are major destinations for medical tourism
  - Large private sector exists
  - Role of the private sector in the overall health system is different
- Controversial: Economic benefits – Equity impact
  - Health services as a source of revenue
  - Private for-profit versus public provision of health services

# Objectives

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- To compare the role of the private hospital sector in the overall health system and for medical tourism in particular, as well as the environment in which it operates
- To review the impact of medical tourism on destination countries' health systems
- To examine company strategies related to medical tourism of major health care companies in Malaysia, Singapore and Thailand

# Method

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- Combination of documentary research (based on existing literature) and analysis of in-depth interview data
  - Experts from academia and industry
  - March 2013

# International Patients & Revenues

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	Malaysia	Singapore	Thailand
International patients (2012)	728,800 (ID, IN, JP)	850,000 (ID, MY, BD)	2,500,000 (JP, US, UK)
Revenues (USD)	125 million (2011)	600 million (2013)	4 billion (2012)

Data sources: International Medical Travel Journal March 15, 2013, Malaysia Healthcare Travel Council, The Nation June 22, 2015, The Straits Times May 8, 2015

# Data Issues

## International Patients vs Medical Tourists

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- **International patients**

- Tourists
- Expatriates
- Medical tourists
  - ✦ “*those who travel to another country with the purpose of consuming health care services, where the foreign country is not their country of origin*” (Rosenmöller, et al. 2006)
  - ✦ GATS Mode 2
    - Intertwined dynamics across four modes

- **Multiple visits**

- ⇒ Estimates likely far too high (Noree, Hanefeld and Smith, 2016)

# Data Issues

## Revenues: Medical Tourism Value Chain

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### Pre-procedure

- Information provision
- Check-up
- Travel logistics
- Visa
- Payment mode

### Procedure

- Medical treatment
- Post-operative care
- Airport transfer
- Accommodation
- Bill clearance

### Post-procedure

- Vacation in destination country or return to home
- Follow-up care
- Satisfaction measurement

### Decision

Patients (and family members and friends), providers, insurance agents, medical tourism facilitators, transport providers, tour operators, government agencies and hotel groups.

Yilmaz and Bititci (2006), Indian Institute of Tourism and Travel Management (2011)

# Data Issues

## Medical Interventions

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- Wellness services as a preventive health service
- Elective health care services: both simple and complex

Procedure	USA	Malaysia	Singapore	Thailand
Heart bypass	130,000	9,000	18,500	11,000
Heart valve replacement	160,000	9,000	12,500	10,000
Hip replacement	43,000	10,000	12,000	12,000
Knee replacement	40,000	8,000	13,000	10,000
Spinal fusion	62,000	6,000	9,000	7,000

Source: Woodman (2007) in Malaysia Healthcare Travel Council 2012, as cited in Penang Monthly: Statistics-February 2013



# Healthcare Systems

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	Thailand	Singapore	Malaysia
THE in % of GDP	3.9	4	4.4
Public in % of THE	75	42	45
OOP in % of THE	14	54	42
Protection	UCS: 76% SSS: 12% CSMBS: 9%	MediSave MediShield MediFund	National health service
Number of hospitals	Public: 988 Private: 322 (mostly FP)	Public: 15 Private: 16 (FP)	Public: 137* Private: 254 (mostly FP)

\* excl. first-level referral hospitals

# Private Hospitals: Malaysia

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Medical tourism hospitals with more than 100 beds	Hospital beds	Market share (%)
KPJ Hospitals*	1,957	23
Pantai Hospitals**	1,482	18
Gleneagles Hospitals**	543	7
Lam Wah Ee Hospital	442	5
National Heart Institute (Institut Jantung Negara)	424	5
Sime Darby Medical Centre Subang Jaya***	393	5
Mahkota Medical Centre	356	4
Assunta Hospital	344	4
Penang Adventist Hospital	276	3
Loh Guan Lye Specialists Centre	265	3
Tung Shin Hospital	238	3
Hospital Fatimah	226	3
Putra Specialist Hospital	225	3
Prince Court Medical Centre	212	3
Island Hospital	192	2
Sunway Medical Centre	185	2
SMC HealthCare Sdn Bhd	175	2
Puteri Specialist Hospital	158	2
Normah Medical Specialist Centre	130	2
Taman Desa Medical Centre	128	2
<b>Total</b>	<b>8,351</b>	<b>100</b>

Data as of April 2013. Compiled from annual reports and internet portals. \* Johor state government, \*\* IHH Healthcare Berhad, \*\*\* Permodalan Nasional Berhad

# Private Hospitals: Singapore

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Medical tourism hospitals with more than 100 beds	Hospital beds	Market share (%)
Institute Of Mental Health (IMH) (public)	2,000	17
National Cancer Centre Singapore (public)	1,500	13
Singapore General Hospital (public)	1,500	13
Tan Tock Seng Hospital (public)	1,200	10
National University Hospital (public)	881	8
KK Women's And Children's Hospital (public)	830	7
Changi General Hospital (public)	790	7
Khoo Teck Puat Hospital (public)	550	5
Mount Elizabeth Hospital*	505	4
Alexandra Hospital (public)	400	3
Gleneagles Hospital*	380	3
Mount Elizabeth Novena Hospital*	333	3
Mount Alvernia Hospital (non-profit)	300	3
Thomson Medical Centre	190	2
National Heart Centre Singapore (public)	186	2
Raffles Hospital	150	1
Parkway East Hospital*	123	1
Total	11,818	100

Data as of April 2013. Compiled from annual reports and internet portals. \* IHH Healthcare Berhad

# Private Hospitals: Thailand

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Medical tourism hospitals with more than 100 beds	Hospital beds	Market share (%)
Bangkok Hospitals (15)*	2,494	20
Phyathai Group of Hospitals (4)*	1,097	9
Samitivej Hospitals (3)*	825	7
Paolo Memorial Group (4)*	697	5
Chiang Mai Ram and Lanna Hospital Group (RAM: 42.89)	609	5
Bumrungrad Hospital (BGH: 23.94%)	538	4
Saint Louis Hospital	500	4
Saint Louis Hospital	500	4
Vejthani Hospital	500	4
Yanhee Hospital	400	3
Bangmod Hospital	400	3
Mongkut Wattana General Hospital	400	3
McCormick Hospital	400	3
Vibhavadi Medical Centre Hospital (RAM: 10.87%)	350	3
Sikarin Public Company Limited (Sikarin Hospital, Rattarin hospital)	335	3
Piyavate Hospital (public)	300	2
Ramkhamhaeng Hospital** (BGH: 38.24%)	300	2
...		
<b>Total</b>	<b>12,680</b>	

Data as of April 2013 . Compiled from annual reports and internet portals. \*BGH (Bangkok Dusit Medical Services PCL), \*\*RAM (Ramkhamhaeng Hospital PLC)

# Policies Related to Medical Tourism

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	Thailand	Singapore	Malaysia
Policies	<ul style="list-style-type: none"> <li>• Strategic plans since 2004</li> <li>• Stepping back</li> </ul>	<ul style="list-style-type: none"> <li>• Implicit support</li> <li>• Stepping back</li> </ul>	<ul style="list-style-type: none"> <li>• Explicit support</li> </ul>
Gov't agencies	<ul style="list-style-type: none"> <li>• Fragmented</li> </ul>	<ul style="list-style-type: none"> <li>• SingaporeMedicine (government-industry initiative launched in 2003)</li> </ul>	<ul style="list-style-type: none"> <li>• National Committee for Promotion of Medical and Health Tourism</li> <li>• Malaysia Healthcare Travel Council</li> </ul>

- Barriers to trade in health services
  - Non-portability of health insurance (mode 2)
    - ✦ Quality of treatment in foreign hospitals, higher costs from follow-up treatments, higher monitoring costs, institutional impediments (public insurance schemes)
  - Entry visas and work permits (modes 2, 3 and 4)
  - Professional and premises licenses (modes 3 and 4)
  - Investment permits (mode 3)

(UN ESCAP 2009, Smith, et al. 2015)

# Private Hospitals

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- Private hospitals are on average smaller than public hospitals, with lower average occupancy rates
- Private hospitals in Malaysia and Singapore are much more active in Asian countries through FDI compared with those in Thailand
- Private hospitals rely on medical tourism facilitators (referral centres)
- Emerging role of the private sector in the production of medical professionals
  - E.g. International Medical University (IMU)

# Impact of Medical Tourism

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THE GROWTH OF MEDICAL TOURISM IN THAILAND...



Cartoon from Stephff, July 19, 2007

# Impact of Medical Tourism on the three Export Countries

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## Pro

- Employment
  - Reduced external brain drain
- Increased revenues
  - Direct
  - Indirect (Tourism – Lee, 2010 and Lee and Hung, 2010)
- Market enlargement & economies of scale
  - Technological upgrading
- Lower prices due to competition

## Con

- Two-tiered health system
- Increased prices
  - Medical tourists pay less than tax-paying patients given that medical education is highly subsidized
- Shortages of health personnel
  - Specialists
  - Teaching staff
  - Internal brain drain driven by demand from Thai patients (Pachanee and Wibulpolprasert, 2006)
- Regulation



# Company Strategies

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Porter's 5 Forces	Findings
New entrants	<ul style="list-style-type: none"><li>• Barriers to entry: mainly modes 3 and 4</li><li>• Gov't policy: Ownership changes<ul style="list-style-type: none"><li>- Malaysia: Expanded gov't role in the private health care segment</li></ul></li></ul>
Rivalry	<ul style="list-style-type: none"><li>• Differentiated services</li><li>• Market segmentation<ul style="list-style-type: none"><li>- Horizontal and vertical expansion of main players</li><li>- Growth: Malaysia ↑, Singapore and Thailand unchanged</li><li>- <i>Public health care sector is not viewed as an expanding market despite UHC movement</i></li></ul></li></ul>
Substitute power	<ul style="list-style-type: none"><li>• Ancillary (luxury) services</li></ul>
Supplier power	<ul style="list-style-type: none"><li>• Shortage of medical doctors in the public sector, especially specialists → private medical education</li></ul>
Buyer power	<ul style="list-style-type: none"><li>• Information asymmetries</li><li>• Market determined out-of-pocket payments, capped in Malaysia</li></ul>

# Key Messages

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- Thailand relatively more restricted and Thai government's approach rather fragmented
- Excess capacity in private hospitals
  - Harness
- Private sector interested in contributing to medical education
  - Grow
- Uncertainty
  - Impact of medical tourism on national health systems debated, yet the evidence is unclear
    - ✦ Data quality
  - Incoherent trade and health policy
- Unchanged strategy vis-à-vis public system despite ownership changes