

# Governing Medical Tourism: The Roles of Singaporean Government

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## Abstract

This article seeks to shed light on a question: “What explains a nation’s medical tourism?” This paper focuses on the roles played by a central government in shaping the industry, especially how it balances the advantages and disadvantages of pursuing medical tourism, which has been underexamined. I attempt to fill such intellectual gap by investigating the roles of Singaporean government in affecting the country’s medical tourism. Via this case, I demonstrate how the state’s authorities crafted the rules and regulations to promote the sector and simultaneously coped with the adverse effects the industry brings to the nation. Insights from my analysis not only extend the existing literatures on the development of medical tourism and roles of domestic political institutions in shaping states’ policy outcomes, but also provide practitioners with lessons useful for crafting effective policies to sustain their countries’ pursuit of medical tourism.

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## 1. Introduction

Medical tourism, defined as “a phenomenon where a patient travels with or without a companion outside his/her country of residence, to another country for medical treatment” (Medhekar 2010, p. 6), is among the world’s fast-growing niche markets. The global medical tourism market figured around US\$ 19.7 billion in 2016 and is expected to reach US\$ 46.6 billion by 2021 (Reuters 2017). In the Asia-Pacific, medical tourism in the new millennium has been booming in a handful Asian economies including Malaysia, Singapore, and Thailand.

Every country faces an inherent trade-off when embarking on its medical tourism endeavor. As pursuing medical tourism begets both benefits and costs to countries providing healthcare services, the trade-off is between such advantages and disadvantages. Regarding the former, this industry is seen by governments as a way to generate foreign-exchange revenues and economic growth. As a result, this sector has been selected by several nations as an ideal economic growth element (Liu, 2012; Ormond, 2013). Other advantages consist of employment, innovation and knowledge transfers, and spill-over effects of a medical tourist industry on other businesses such as food and entertainment as a part of medical tourists’ overseas expenditures (Bookman and Bookman 2007; Janjaroen and Supakankunti 2002; Waldby 2009). As for the disadvantages, they encompass internal brain drain (i.e. a situation in which skilled personnel leave the public healthcare sector for the private one), development of dual healthcare system which can entail unequitable access to medical treatments and innovations, and rising healthcare costs (Chanda 2002; Kangas, 2007; McLean 2008; Varman and Vikas 2007).

Against this backdrop, this article seeks to shed light on the main research question: “What explains a nation’s medical tourism?” The paper focuses on the roles played by a central government of service-exporting economies. It is because the government’s main tasks are to pursue economic growth and development as well as supply the population accessible services namely healthcare. Nonetheless, knowledge about how the government balances the above trade-off is sparse. Therefore, this study is aimed at filling such intellectual gap by investigating the case study of Singapore. Medical tourism in Singapore deserves an examination because the country is among the most popular destinations for overseas patients (Beladi et al. 2015) and its medical tourism industry can affect the region’s and world’s healthcare markets. For instance, its government’s strategies may further enhance the growth of Singapore’s medical tourism which can capture the market shares used to be enjoyed by other regional economies. Via this case, I demonstrate how the state’s authorities crafted the rules and regulations to promote the sector and simultaneously cope with the adverse effects that the industry brings to the country. Insights from my analysis not only extend the existing literatures on the development of medical tourism and roles of domestic political institutions in shaping states’ policy outcomes, but also provide practitioners with lessons useful for crafting effective policies to sustain their countries’ pursuit of medical tourism.

The organization of this article is as follows. Section Two presents the literatures concerning the roles of domestic institutions in East Asia in contributing to countries’ medical tourism and a short analytical framework. Section Three explores the Singapore’s healthcare system and medical tourism industry in terms of market structure, capability, and operation. Section Four discusses the roles of the Singaporean authorities in designing rules and regulations to govern medical tourism in the country. The last section concludes and provides suggestions for future studies.

## 2. Literature Review and Analytical Framework

Scholars have shown that a state plays a significant role in influencing a medical tourism industry. The distribution of economic benefits and losses is largely determined by politics, which is best “conceptualized as consisting of all the many activities of cooperation, conflict and negotiation involved in decisions about the use, production and distribution of resources (Leftwich 2008, p.6).” One strand of literatures emphasizes the roles played by domestic political institutions in explaining countries’ development trajectories because these institutions aggregate various interests in the society and create rules and mechanisms to govern the behavior of stakeholders involved in economic activities (Doner 2012; Grabowski 2012). Illustratively, Doner et al. (2005, p. 328) contended that rapid economic growth in East and Southeast Asia was attributed to a developmental state, which encompasses “organizational complexes in which expert and coherent agencies collaborate with organized private sectors to spur national economic transformation.” In other words, relying on a “state leads, market follows” approach, a developmental state deliberately intervenes by, for example, selecting ‘national champions’ to pursue industrialization and achieve the economies of scale in international markets (Woo-Cumings 1999; Kohli 2004). In the case of Singapore, the country can be considered a technocratic state with a functioning bureaucracy, enabling its government to design and implement interventionist measures affecting its economy (Barr 2008).

While these studies yield valuable insights into the understanding of how domestic political institutions shape country’s economic development, works scrutinizing in detail how governments conduct cost-benefit calculations which in turn determine healthcare policies are scarce. As earlier illustrated, governments pursuing healthcare liberalization encounter the trade-off. Put differently, they face an inherent tension between reaping the benefits from participating in trade in healthcare services on the one hand, and protecting particular interests on the other. This research fills the literature lacuna by examining via the Singapore case how states’ officials managed such tension. Hence, the independent variable is the authorities’ trade-off management, and the dependent variable is medical tourism outcomes. My argument is that the Singaporean officers undertook a cost-benefit analysis to balance such trade-off which eventually determined the rules and regulations pertaining to the medical tourism industry. Consequently, this allowed the nation to obtain the gains from its pursuit of medical tourism and lessen the negative consequences which such action brings to its public healthcare and citizens.

## 3. Singapore’s Healthcare System and Medical Tourism Industry

In Singapore’s healthcare system, there are three main categories of hospitals. First, acute hospitals are hospitals and specialty centres (excluding Psychiatric Hospitals) which provide acute or short-term care with inpatient facilities. Second, psychiatric hospitals are facilities diagnosing and treating mental conditions and disorders. Finally, community hospitals provide medical services for those requiring a short period of continuation of care, usually after their discharge from the acute hospitals (Ministry of Health, Singapore 2017; Department of Statistics, Singapore 2017). The number of hospitals and their capacity (using the number of beds as a proxy for capacity) are illustrated in Table 3.1 and Table 3.2.

Table 3.1: Number of Hospitals in Singapore (2006-2017)

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Acute Hospitals	14	14	14	14	15	15	17	17	18	19	19	18
Public	7	7	7	7	8	8	8	8	8	9	9	9
Non-profit	1	1	1	1	1	1	1	1	1	1	1	1
Private	6	6	6	6	6	6	8	8	9	9	9	8
Psychiatric Hospitals	2	1	1	1	1	1	1	1	1	1	1	1
Public	1	1	1	1	1	1	1	1	1	1	1	1
Non-profit	0	0	0	0	0	0	0	0	0	0	0	0
Private	1	0	0	0	0	0	0	0	0	0	0	0
Community Hospitals	5	5	6	6	6	6	6	6	6	7	8	8
Public	0	0	0	0	0	1	1	1	1	3	3	3
Non-profit	4	4	5	5	5	4	4	4	4	4	4	4
Private	1	1	1	1	1	1	1	1	1	0	1	1

Source: Ministry of Health of Singapore

Table 3.2: Capacity of Hospitals in Singapore (2006-2016)

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Acute Hospitals	8,187	8,235	8,190	8,289	8,249	8,304	8,725	8,939	9,262	9,844	10,318
Public	6,256	6,304	6,255	6,416	6,871	6,925	7,170	7,377	7,652	8,128	8,561
Non-profit	303	303	303	303	283	283	283	283	283	316	316
Private	1,628	1,628	1,632	1,570	1,095	1,096	1,272	1,279	1,327	1,400	1,441
Psychiatric Hospitals	2,113	2,064	2,064	2,040	2,010	2,010	2,010	2,010	1,950	1,950	1,950
Public	2,064	2,064	2,064	2,040	2,010	2,010	2,010	2,010	1,950	1,950	1,950
Non-profit	0	0	0	0	0	0	0	0	0	0	0
Private	49	0	0	0	0	0	0	0	0	0	0
Community Hospitals	771	749	872	877	842	800	842	852	1,065	1,464	1,663
Public	0	0	0	0	0	100	100	110	142	503	690
Non-profit	713	691	814	819	818	680	722	722	905	961	961
Private	58	58	58	58	24	20	20	20	18	0	12

Source: Ministry of Health of Singapore

Regarding the country's medical tourism, main players tend to come from the private sector. The top three ones comprises Parkway Pantai Limited, Thomson Medical Group, and Raffles Medical Group. Parkway Pantai Limited is a fully-owned subsidiary of IHH Healthcare Berhad. With its market capitalization of S\$ 12.9 billion, it is the largest private healthcare services provider in Singapore and Asia. The company also operates in other countries with India, Malaysia, and Turkey among them (IHH Healthcare Berhad 2018). Parkway Hospital Singapore operates Parkway East Hospital, Gleanaeagles Hospital, Mount Elizabeth Hospital, Mount Elizabeth, and Novena Hospital (Parkway Holdings Limited 2018). These hospitals offer more than 1,000 beds in total (Parkway Hospital Singapore 2019). Regarding Thomson Medical Group it was established in 1979 is a private healthcare provider specialized in Obstetrics& Gynecology and Pediatrics. Thomson Medical Centre which is a hospital from this Group has 190 beds and caters its services to women and children (Huang 2016). Its market capitalization stands at about S\$ 2.03 billion. Concerning Raffles Medical Group, it was founded in 1976 by Dr. Yong Loo Choon and Dr. Alfred Loh. "More than 35 per cent of Raffles Hospital's patients are foreigners, comprising

nationals from more than 100 countries" (Raffles Medical Group 2018a). Its market capitalization is now at S\$2 billion (Raffles Medical Group 2018b). The Group runs one flagship hospital, a 380-bed Raffles Hospital, and more than 80 clinics across Singapore (DBS Group Research 2017). Since the opening of its overseas branch in Hong Kong in 1995, the Group has supplied healthcare in other Asian nations including Cambodia, China, Japan, and Vietnam (Raffles Medical Group 2018c).<sup>1</sup>

A careful look at the state's medical tourism terrain reveals that there exist certain wholly-foreign owned private healthcare providers. For instance, Parkway Pantai Limited is fully owned by IHH Healthcare Berhad, which is a multinational investment company. The firm's main shareholders are largely foreigners: Malaysia's Khazanah Nasional Berhad (the Malaysian government's sovereign wealth fund) (40.3 percent); Sweden's Xact Kapitalforvaltning AB (18.9 percent); Japan's Mitsui & Co., Ltd. (18.0 percent); and Malaysia's Employees Provident Fund (8.8 percent). Also, while more than 85 percent of Thomson Medical Group is owned by a Singaporean billionaire Peter Lim, Tunku Ismail Ibni Sultan Ibrahim (the crown prince of Malaysia's Johor) obtains about 2 percent of the Group's total shares (Marketscreener 2018). Concerning Raffles Medical Group, its founder Dr. Yong Loo Choon held 48.9 percent of its total shares. Foreign investment companies hold minority stakes such as the United Kingdom's First State Investment Management Ltd. (2.5 percent) and the United States (U.S.)' Vanguard Group Inc (1.1 percent) (Nikkei Asian Review 2018b).

Singapore's capability to cater healthcare to its residents by public and private healthcare providers is demonstrated in Table 3.3. The dependency ratios have been up from 2006 to 2017. To elaborate, during this period the total number of medical-related workers per patient, per total population, per dependent population, and per aging population rose by 61.85%, 74.8%, 97%, and 27.08% respectively. The ability to deliver high-standard medical services is also reflected by international accreditation (Wong and Musa 2012). At the time of this writing, the American Joint Commission International (JCI) accredited 21 Singapore's facilities. All public healthcare hospitals in the city-state are JCI-accredited (JCI 2018).

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<sup>1</sup> Public-owned hospitals also participate in the nation's medical tourism. MOH has MOH Holdings (MOHH) which "is the holding company of Singapore's public healthcare clusters – National University Health System, National Healthcare Group and Singapore Health Services." (MOH Holding 2018). In other words, MOHH has controlled public healthcare facilities and clusters after the country decided to corporatize its healthcare system in the 1980s. While MOH does not obviously promote the medical tourism industry as doing so clashes with its main function of providing the Singaporean residents access to affordable healthcare, some public hospitals nevertheless pursue medical tourism by working with international referral agencies (Gan & Federick 2011).

Table 3.3: Number of Medical-Related Workers and Adequacy Ratios (2006-2017)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Doctors</b>	6,931	7,384	7,841	8,323	9,030	9,646	10,225	10,953	11,733	12,458	12,967	13,386
<b>Dentists</b>	1,376	1,413	1,484	1,531	1,579	1,611	1,699	1,821	1,905	2,060	2,198	2,293
<b>Pharmacists</b>	1,421	1,483	1,546	1,658	1,814	2,013	2,172	2,376	2,563	2,757	2,875	3,047
<b>Registered Nurses</b>	15,452	16,504	17,881	19,733	21,575	23,598	25,971	27,556	28,864	29,894	31,615	32,672
<b>Optometrists and Opticians</b>	N/A	N/A	2,286	2,324	2,419	2,441	2,478	2,461	2,610	2,624	2,650	2,605
<b>Occupational Therapists</b>	N/A	905	967	1,067	1,125							
<b>Physiotherapists</b>	N/A	1,394	1,549	1,693	1,814							
<b>Speech Therapists</b>	N/A	400	474	524	595							
<b>Traditional Chinese Medicine Physicians</b>	1,946	2,050	2,167	2,203	2,322	2,444	2,538	2,629	2,740	2,808	2,868	2,952
<b>Acupuncturists</b>	138	182	206	218	218	235	235	244	240	249	247	254
<b>Total Number of Medical-Related Workers</b>	27,264	29,016	33,411	35,990	38,957	41,988	45,318	48,040	53,354	55,840	58,704	60,743
<b>Number of Patients</b>	1,527,778	1,596,510	1,598,270	1,564,307	1,616,087	1,663,208	1,708,627	1,789,432	1,846,059	1,900,252	2,061,505	2,102,451
<b>Number of Population</b>	4,401,365	4,588,599	4,839,396	4,987,573	5,076,732	5,183,688	5,312,437	5,399,162	5,469,724	5,535,002	5,607,283	5,612,253
<b>Number of Dependent Population (younger than 15 years old and older than 64 years old)</b>	980,891	984,045	987,097	997,983	9,927,96	9,895,49	1,004,953	1,019,680	1,039,556	1,062,130	1,083,734	1,111,173
<b>Number of Ageing Population (65 years old and above)</b>	294,726	305,586	315,790	330,132	338,387	352,645	378,636	404,437	431,601	459,715	487,570	516,692
<b>Dependency Ratio 1 (Total Number of Medical-Related Workers/Number of Patients)</b>	0.018	0.018	0.021	0.023	0.024	0.025	0.027	0.027	0.029	0.029	0.028	0.029
<b>Dependency Ratio 2 ((Total Number of Medical-Related Workers/Number of Population)</b>	0.006	0.006	0.006	0.007	0.008	0.008	0.009	0.009	0.010	0.010	0.010	0.011
<b>Dependency Ratio 3 (Total Number of Medical-Related Workers/Number of Dependent Population)</b>	0.028	0.029	0.034	0.036	0.039	0.042	0.045	0.047	0.051	0.053	0.054	0.055
<b>Dependency Ratio 4 ((Total Number of Medical-Related Workers/Number of Aging Population)</b>	0.093	0.095	0.106	0.109	0.115	0.119	0.120	0.119	0.124	0.121	0.120	0.118

Sources: Ministry of Health of Singapore; Department of Statistics of Singapore.

Regarding the number of medical tourists, there exists a data collection problem. The number of foreign patients receiving medical services in Singapore can be exaggerated to some extent as medical travelers may encompass those accompanying the individuals receiving treatment. Also, the number of foreign patients may incorporate expatriates receiving medical services in Singapore, masking the true number of medical tourists.

The government does not release these figures to the public. In this paper, the numbers of medical tourists – defined as “those who travel to another country with the purpose of consuming health care services, where the foreign country is not their country of origin” (Herberholz & Supakankunti 2013) – were gathered from various secondary sources (see Table 3.4). To collect such information, archival research was carried out on reliable sources namely international organizations and peer-reviewed academic articles and reports. In the cases that the data could not be found from these above sources, internationally-recognized newspaper or news magazines such as *Sydney Morning Herald* and *The Economist* were consulted to get the figures.

Table 3.4: Number of Singapore’s Medical Tourists (2005 -2017) (in thousands)

Year	2005	2006	2007	2008	2009	2010	2011
<b>Number of Medical Tourists</b>	370	410	400	370	665.380	N/A	500
<b>Sources</b>	UNESCAP (2009)	Foreign Policy (2008)	Lim (n.d.)	IMTJ (2013)	Kim et al. (2013)	N/A	Sydney Morning Herald (2012)

Year	2012	2013	2014	2015	2016	2017
<b>Number of Medical Tourists</b>	850	610	N/A	N/A	N/A	N/A
<b>Sources</b>	IMTJ (2013)	Coelho (2015)	N/A	N/A	N/A	N/A

Source: Author’s explanation.

In terms of markets for Singapore’s medical tourists, the top three are Indonesia, Malaysia, and China. This is followed by patients from Australia, the U.S., United Kingdom, the Philippines, and Middle Eastern countries (PR Newswire 2017). Due to very limited data availability, there are no breakdowns of these medical tourists. Yet, only few sources reveal the percentages. For instance, the Economist Intelligence Unit (2014) reports that “Indonesians continue to make up the majority of foreign patients, at around 50% in 2011 (latest available data), according to the health ministry.”

The roles of intermediaries should be highlighted to better the understanding of the country’s medical tourism. To elaborate, multinational insurance companies have contributed to the rise of medical tourism industry in Singapore. Soaring healthcare costs in advanced economies have tempted employers to promote medical travel among their workers. Individuals in advanced economies subscribe to insurance schemes that permit overseas medical trips, enabling them to seek treatment at more affordable prices elsewhere than their home country. “Some insurers have launched pilot schemes in

partnership with foreign hospitals, such as those in Singapore, which have the potential to save insurers money, particularly for procedures costing \$20,000 or more" (Bergstrand 2008). Some key brokerages offering medical tourism packages encompassing Aetna International, Cigna, Global Protective Solutions and Seven Corners Worldwide. Moreover, Singaporean healthcare providers in both public and private sectors have been known to work with overseas referral agencies (e.g. travel agencies) in both developed and developing nations to attract more foreign patients. These are inclusive of public National Healthcare Group (NHG) and Singapore Health Services (SingHealth), and private Parkway Pantai Group and Raffles Medical Group. Referral agencies locate in both developed and developing countries such as Bangladesh, Canada, Indonesia, Malaysia, Russia, and the U.S. (Gan & Federick 2011).

In addition, Singapore's medical tourism tend to capture niche markets where domestic demands are low. This is echoed by the activities undertaken by three main private players in the industry: Parkway Pantai, Raffles Medical Group, and Thomson Medical Group. To elaborate, these hospitals specialize in cardiology which does not generate high demands from the local population. In short, most patients seeking cardiac care from these private facilities tend to be foreigners/medical tourists. Table 3.5 outlines more details about the specializations.

Table 3.5: Activities and their Relative Importance in Medical Tourism

	Relative Importance	Remarks
1. Executive health evaluations	R*, P*	
2. Ophthalmologic(eye) care	R**, P*	Raffles has an eye center
3. Dental care	R*, P*, T*	
4. Surgery		
4.1. Bariatric procedures	R*, P*	
4.2 Cosmetic	R**	Raffles has a skin and aesthetics center
4.3 Hip/Orthopedics	R**	Raffles has an Orthopedics center
4.4. Cardiac	R***, P***, T*	Raffles' heart center is well-known; Parkway's Mount Elizabeth hospital and Parkway East hospital has specialization in cardiology
4.5. Sexual reassignment	-	-
4.6 Dentistry	R**; P*	Raffles has a dental center
4.7. Others (neurology)	P***, R**	Parkway's Gleneagles and Mount Elizabeth hospitals have performed the biggest number of neurological surgeries in Singapore; Raffles has a neurological center
4.8. Others (OBGYN and Pediatrics)	T***, P**, R**	Thomson covers a wide range of OBGYN and Pediatrics services (e.g. maternity, children's health, women's health, women cancer); Parkway East Hospital also has expertise in Pediatrics; Raffles has a Children's center

Notes: P = Parkway Pantai; R = Raffles Medical Group; T = Thomson Medical Group; \*\*\* = most importance; \*\* = moderate importance, 8 = least importance

Sources: Parkway Pantai (2019); Raffles Medical Group (2017); Thomson Medical Group (2020)

#### **4. Managing the Trade-off: The Roles of the Singaporean Government in Shaping the Medical Tourism Industry**

Singapore planned to promote its healthcare services to the global markets before 2000s. Phua (1991, p. 6-7) documented that the authorities in the late 1980s envisaged the development of private specialized medical services as a part of the goal for transforming the city-state into an international medical hub. However, they made no connection between medicine and tourism and hence the term “medical tourism” was not used. The official government’s support for the industry appeared in 2003. In October 2003, Singapore Medicine, an initiative to promote and advertise the country’s medical tourism in the international market with a main objective of developing the city-state as a regional medical hub, was launched by Singapore Tourism Board (STB), along with the Economic Development Board (EDB) and International Enterprise (IE) Singapore. These entities worked in tandem to promote the medical tourism industry. Illustratively, EDB attracted new investment to healthcare sector, IE Singapore promoted the growth of overseas interests in Singapore’s healthcare, and STB helped with the branding and marketing of the country’s healthcare services via the entity’s regional offices.

Several reasons underscored the government’s decision to promote medical tourism. For one thing, the public authorities saw this industry as a type of service exports contributing to the country’s GDP due to the sector’s competitive edge in the international market. For instance, the average expense of total hip replacement charged by private hospitals/clinics in the city-state is about S\$ 35,484 (US\$ 26,107) as compared to US\$ 40,364 in the U.S. (Ministry of Health Singapore 2019a; Statistica 2019b). The charge of a bypass heart surgery charged by private hospitals/clinics in Singapore is S\$ 75,398 (US\$ 55,473) while such price can be US\$ 200,000 or more in the U.S. (Costhelper 2019; Ministry of Health Singapore 2019b). As a result, the city-state has treated many American patients and the U.S. is among the former’s main customers. Also, the other industries in the economy benefit from medical tourism. Illustratively, “every dollar of direct foreign patient expenditure translates to an additional 92 cents for the Singapore economy, through spending on hotel accommodation, food, transportation and shopping” (Yong 2018, p. 7). Moreover, the profits generated from medical tourism are taxable, which could be invested in research and development (R&D) in the public healthcare sector to raise the capacity of Singapore’s healthcare services offered to the local population (Lee 2010; Lee and Hung 2010; Medhekar 2014).

Additionally, the officials wanted to promote medical tourism in niche markets or certain medical specialties and sub-specialties which did not register high domestic demands such as heart surgery. To articulate, the physicians at the National Heart Centre conducted fewer than 300 bypass operations annually. There were only 75 of such surgeries being performed at National University Hospital of Singapore per year (Lim 2015). Therefore, encouraging medical tourism industry enables Singapore to leverage on overseas patients to boost the overall demands of these specialties and subspecialties. In other words, Singapore’s 5.6 million population produces insufficient local demand for some specialties or sub-specialties. With inadequate demands, the number of professionals in these fields and sub-fields may shrink, jeopardizing the state’s future ability to provide quality healthcare to its population. Because of this, medical tourism was seen as a solution to this problem as it heightens the overall demand, helps retain personnel in certain medical specialties and sub-specialties, and

allows the country to continue catering specialized medical services to its residents (Chen and Flood 2013; Ganguli and Ebrahim (2017)). In sum, seeing many benefits that the medical tourism sector would bring to the country, the Singaporean government decided to support it.

The authorities' promotion of medical tourism has been manifested in several policies concerning medical tourists, healthcare providers, dispute settlement mechanism, and international cooperation. One area involves entry requirements for medical tourists. The government does not issue a medical tourist visa because a visitor's visa suffices to enter Singapore to receive medical care. It should be noted that a tourist's visa requirement varies across countries. Tourists from states such as Australia, Canada, European Union (EU), U.S. and U.K. do not need a visitor's visa to enter Singapore for a 30-day stay. After ratifying the ASEAN Framework Agreement on Visa Exemption (AFAVE), Singapore exempts ASEAN nationals from visa requirement for their stay up to 14 days. However, passport holders from the other states must apply for an entry visa.<sup>2</sup> The normal processing time for visa application is 1 working day, excluding the day of document submission and the weekends. However, some applications may take longer which can be due to missing documents or further profile checks. (ICA 2018a).

To further encourage medical tourism, the officials provide a long-stay option. While there is no procedure to renew such visa, the government may grant the extension of a visitor's pass up to 90 days (ICA 2018b; ICA 2018d). The extended length of stay is subject to the Immigration & Checkpoints Authority Singapore (ICA)'s discretion after reviewing the application and required documents. Medical travelers can stay up to 90 days in Singapore.<sup>3</sup> The normal processing time after submitting the application and documents is 1 working day (ICA 2018c).

To attract more medical tourists, the Singapore government ensures several kinds of dispute settlement mechanisms are available to foreign patients. For example, they can settle their disputes between themselves and their healthcare providers via litigation and mediation, which are in line with international standards. Concerning litigation, a medical negligence case can be filed to and heard in either the High Court or the State Courts of Singapore, depending on the amount of claims the patient is requesting. Cases which claims exceed S\$ 250,000 are heard at the High Court (Supreme Court Singapore 2018). Cases which claims do not exceed S\$ 250,000 are heard at the State Courts. Beside litigation, disputing parties can choose to resolve their cases through mediation. Singapore International Mediation Center offers mediation services whereby a panel is set up to settle the disputes.

In regard to healthcare providers, the government encourages Singaporean and non-Singaporean entrepreneurs to set up operating private hospitals in the country<sup>4</sup>. In

<sup>2</sup> The first entry requirements of medical tourists are similar to other kinds of visitors which consist of (but not limited to) passports or travel documents (at least 6 months validity), return/onward tickets, and sufficient fund supporting their stay and purposes in Singapore.

<sup>3</sup> An applicant wanting a long stay in Singapore for medical treatment must submit the following documents: Form V75 (an application for extended stay on medical ground) signed by a registered doctor in Singapore and the applicant; a letter from a registered doctor in Singapore detailing the applicant's illness and the period required for such treatment; a travel document/passport with at least 6 months validity; and a Disembarkation/Embarkation card with a valid Visit Pass granted when entering Singapore (ICA 2018e).

<sup>4</sup> In the public healthcare sector, all hospital clusters are entirely owned by MOHH since the government's decision to corporatize the public healthcare in 1980s. Singapore under the Protocol to Implement ASEAN Framework Agreement on Services (AFAS)'s Ninth Package (2015) forbids foreign investment and ownership in the public realm, namely the "supply of health services by

the private healthcare sector, there is no foreign ownership restriction and no restrictions on who can run hospitals. In other words, the city-state neither prohibits nor imposes a maximum cap on the portion of the stakes non-Singaporeans can hold in the private healthcare facilities.<sup>5</sup> The Private Hospitals and Medical Clinics Regulations (last amended in 2002) outlines the licensing procedures and MOH is tasked to make license-granting decisions. An application with the requisite license fee must be submitted to the MOH's Licensing, Inspection & Audit Branch no later than 2 months before the commencement of a facility's operation. For institutions with multiple branches, each branch must submit a separate application for individual licenses.<sup>6</sup> It should be noted that these private facilities are prohibited from using the words "Singapore" or "National" as a part of their names "unless they fulfil or intend to fulfil a national role or its equivalent." (Elis 2017). A license renewal is possible and must be made no later than 2 months before the license's expiry date; otherwise a penalty for a late renewal will be made. The late fee can be 20 percent of the license renewal fee or S\$100, whichever greater. To further expedite the establishment of private medical institutions, the authorities do not require these entities to purchase insurance for their liability.

Foreign investment is another way the Singaporean government utilises to boost its medical tourism sector. As far as inward foreign investment is concerned, key agencies are the Economic Development Board (EDB) and Enterprise Singapore<sup>7</sup> under the Ministry of Trade and Industry (MTI). EDB "is responsible for strategies that enhance Singapore's position as a global centre for business, innovation, and talent" (Economic Development Board 2019a) while Enterprise Singapore works on "championing enterprise development" (Enterprise Singapore 2019). Despite their different focuses, both entities have launched several programmes providing incentives to attract foreign capitalists to invest in the country. For instance, EDB's Pioneer Certificate Incentive (PC) & Development and Expansion Incentive (DEI) are aimed at attracting foreign overseas enterprises to establish their facilities conducting new or expanded economic activities in Singapore. PC & DEI offers incentives such as corporate tax exemption and reduced concessionary tax rate. Firms under this programme enjoy "a corporate tax exemption or a concessionary tax rate of 5% or 10%, respectively, on income derived from qualifying activities" (Economic Development Board 2019b). Moreover, Enterprise Singapore has Angel Investor Tax Deduction Scheme for venture capitalists or fund managers wanting to invest in startup companies in Singapore. Eligible investors or fund managers can benefit from a tax deduction of

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government-owned or controlled health institutions, and . . . investments in government-owned or controlled health institutions (CPC 93110)" (ASEAN 2015).

<sup>5</sup> For instance, one of the leading private healthcare provider, the Parkway Pantai Limited is fully-owned by IHH Healthcare Berhad and more than 80 percent of the latter's stakes are owned by foreigners. However, there may be certain restrictions due to procedures pertaining to the operation of the hospitals (e.g. licensing requirements, land lease policies). Illustratively, Singapore Land Authority has a history of refusing to release land to healthcare providers citing that the area was inaccessible to the general public (Phua and Pocock 2011).

<sup>6</sup> The applicant is the intended licensee. In a case that a company is the intended licensee, the person applying for the license must be the firm's senior staff such as company's Director, Secretary, Treasurers, Chief Executive Officer (CEO), and Chief Operating Officer (COO). In terms of naming medical institutions, it "must contain the word "Medical/Dental Clinic", "Medical/Dental Centre", "Laboratory", "Hospital", or "Nursing Home"" which align with the category of license being applied for.

<sup>7</sup> Enterprise Singapore was created in April 2018, but it is not a new institution. In fact, it was a result of the merger between two existing entities, International Enterprise Singapore (IE Singapore) and SPRING Singapore

50 percent of their investment at the end of a two-year holding period (Startup SG Network 2019).<sup>8</sup>

As for outward foreign investment, EDB and Enterprise Singapore are the main entities spearheading the promotion Singapore's outward investment. Companies can apply for EDB's tax exemption and reduction schemes. As for Enterprise Singapore, it lists "Healthcare and Biomedical" as one of the industries intending to promote an overseas expansion. It does not tailor specific schemes for companies in these sectors. Thus, interested healthcare and biomedical firms can apply for the entity's programmes as companies in the other industries do. One example is the Double Tax Deduction Scheme for Internationalisation (DTDi) which offers firms "a 200% tax deduction on eligible expenses for international market expansion and investment development activities" (Enterprise Singapore 2018b). Under this tax relief scheme, companies showing proofs that they are planning to expand or are expanding overseas (e.g. market preparation, market exploration) can deduct their taxes up to S\$ 150,000 per year of assessment.

Also, Enterprise Singapore offers Internationalisation Finance Scheme (IFS) to assist Singapore-based firms "with main business functions in Singapore and annual sales revenue (including subsidiaries) of less than S\$ 500 million (for trading companies) or less than S\$ 300 million (for non-trading companies)" aspiring to establish its overseas affiliations to get access to finances (Enterprise Singapore 2018c). Specifically, this programme provides indemnification to Participating Financial Institutions (PFIs) supporting these companies in order to make PFIs more willing to lend to these firms. Like DTDi, IFS is a uniform incentive and not specific to the medical tourism industry.<sup>9</sup>

As far as international cooperation is concerned, Singapore is pursuing the liberalization of healthcare and healthcare-related services. The Protocol to Implement AFAS' Ninth Package (2015) is a case in point. Under this agreement, Singapore is committed to liberalise a wide range of healthcare and healthcare-related services, namely medical services, specifically general medical services (cpc 93121); specialized medical services (cpc 93122); dental services (cpc 93123); and deliveries and related services, nursing services, physiotherapists, and para-medical personnel (CPC 93191). However, there exist certain restrictions over foreigners' provision of hospital services in the public realm. As seen in the Ninth Package, Singapore forbids foreign investment and ownership in: "(i) supply of health services by government-owned or controlled health institutions, and (ii) investments in government-owned or controlled health institutions (CPC 93110)" (ASEAN 2015).

Like other countries pursuing medical tourism, Singapore faces certain adverse effects of such action. The industry has contributed to soaring healthcare costs, bed shortages at public facilities, increased difficulties in accessing affordable healthcare services, and brain drain (Chen and Flood 2013). One study unveiled that differential pricing for medical tourists could drive up services charges to local patients over time, increasing the overall healthcare costs (Pocock and Phua 2011). Moreover, the fact that the country is undergoing a swift transition into an aging society further fuels the

<sup>8</sup> It should be noted that both EDB's and MTI's schemes are general and not specific to healthcare sector and medical tourism. For example, EDB lists "Medical Technology" among the sectors it plans to attract foreign investment into the country. However, the agency does not design specific programmes to develop this industry. Interested entrepreneurs can apply, like those in other sectors, for government assistance schemes.

<sup>9</sup> Enterprise Singapore also assists businesses by providing training programmes aimed at increasing their capacity and product innovation and launches international roadshows (Enterprise Singapore 2018a).

public's criticism of the government's medical tourism endeavor.<sup>10</sup> The Singaporean public viewed that the government's subsidy to the public hospital hovering around \$2.2 billion (Haseltine 2013, p. 100) is to be used to provide healthcare to the population, not foreigners. As a result, the citizenry chastised that the fact that the authorities use public healthcare facilities to serve overseas patients. To elaborate, *Theonlinesitizen.com*, an independent Internet news platform, highlights that "government hospitals operate using taxpayers' monies and their first priority must always be directed towards Singaporeans' healthcare interests and well-being" (Lim 2018a).

Realizing the undesired impacts of medical tourism on the nation, the Singaporean authorities have attempted to lessen such effects. One approach to provide quality healthcare for its citizens through a national healthcare system. Singapore invests a lot in public healthcare. Due to its small population, the healthcare expenditure as % GDP may not appear high. Nonetheless, the country's healthcare spending per capita in 2015 (US\$ 2,280.28) ranks Number 1 in Southeast Asia and Number 27 in the world (World Bank 2018). Second, the government is determined to make its population access affordable healthcare. The White Paper *Affordable Health Care* released in 1993 listed ensuring "good and affordable basic medical services for all Singaporeans" as one of its objectives (Haseltine 2013, p. 11). The officials' effort has been reflected by the fact that the government funds 32 percent of national healthcare for its population (Medhekar 2014). MOH and Ministry of Finance (MOF) subsidize more than 80 percent of class B1 wards (four-bedded rooms) and C wards (nine-bedded rooms). Moreover, Medifund, an endowment fund supporting its citizens "who face financial difficulties with their remaining bills after receiving Government subsidies and drawing on other means of payment including MediShield Life, MediSave and cash", was introduced in 1993 (Ministry of Health Singapore 2018c). In addition, MOH in 2012 launched the Community Health Assist Scheme (CHAS) to hand out subsidies for medical and dental care to lower-to-middle income households (Ministry of Health Singapore 2018b).

It should be noted that the Singaporean authorities' attempt to help its residents get access to healthcare predated the 1993 White Paper. To articulate, the government set up the Central Provident Fund (CPF) in 1955. CPF is a compulsory saving scheme for all working Singaporeans and Permanent Residents (PRs) over the age of 21. Employees contribute 20 percent of their salary while their employers chip in 17 percent of the employee's salary into the Fund (Central Provident Fund Board 2018). CPF's primary goal is to help these individuals save up their income for several purposes (e.g. healthcare, housing, and other expenses). The Fund is managed by the CPF Board under the Ministry of Manpower (MOM). In 1984, a Medisave account was created in 1984 to help "CPF members save for future medical expenses, especially after retirement" (Central Provident Fund 2018). Also, "MediShield Life" or an opt-out insurance scheme giving basic coverage has been administrated by the CPF Board since 2015 (Ministry of Health Singapore 2018d).

In terms of addressing the country's rising healthcare cost, the government has encouraged the Singaporean citizens to seek more affordable healthcare in Malaysia. Since 2010, these individuals have been allowed to tap on their Medisave to cover their expenses at certain Singaporean-government-approved private hospitals in Malaysia which charge about 25-35 percent less than those in the city-state (Ministry of Health Singapore 2010; Gan 2010). It should be noted that these approved facilities are owned

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<sup>10</sup> Interview with the executive of a Singaporean public hospital, Singapore, 19 March 2019.

by Singaporean healthcare groups namely Health Management International (HMI) and Parkway Holdings.

Pressured by the increased public's outcry about the soaring cost, the officers re-introduced price guidelines. It should be mentioned that the country used to have price guidelines set by the Singapore Medical Association (SMA), but they were scrapped about a decade ago as they were perceived as market-distorting measures undermining competition.<sup>11</sup> During the period without cost-containment mechanisms, the government tried to keep the healthcare cost low via several measures such as imposing restrictions on the use of Medisave and MediShield to decrease unnecessary doctor visits.

The government set up the Health Insurance Task Force (HITF) which members comprising the representatives from MOH, SMA, and Monetary Authority of Singapore to investigate the issue. The HITF published a report in 2016 to "better understand the factors affecting the cost of health insurance in Singapore" (HITF 2016: 3). This study found a link between increasing healthcare costs and patients' insurance. To delineate, two-thirds of Singaporean residents purchase an "Integrated Shield Plan" (IP) (an add-on insurance scheme on top of MediShield Life) enabling them to evade paying their own private-hospital bills. As "these policyholders are insulated from the cost of their medical charges, they may lack the incentive to manage their health and medical costs, translating to higher insurance claims" (HITF 2016: 12). In other words, IP subscribers have insurance companies settle their medical bills on their behalf. Hence, these individuals usually seek higher-quality services (partly due to better skilled doctors and shorter waiting times) at private facilities which charge more than public ones (Khalik 2016b). Consequently, this leads to increased insurance premiums and higher healthcare costs.

It should be noted that because the HITF Report focused on insurance prices, it did not examine the effects of medical tourism on rising healthcare expenses. Yet, a closer look reveals a link among medical tourism, insurance premiums, and healthcare expenses. In other words, medical tourism contributes to higher insurance costs, which in turn push up healthcare expenditures as revealed by the Report. As mentioned above, due to differential pricing for medical tourists, private-sector physicians eventually raise their fees on Singaporean patients (Pocock and Phua 2011). Also, IP subscribers (accounting for two-thirds of Singaporean residents) have insurance firms cover their medical bills for them. These patients often go to private hospitals as they are not deterred by high medical charges (Khalik 2017). These factors combined leads to increased insurance premiums and healthcare expenses.

MOH later welcomed the HITF's recommendations especially introducing medical fee benchmarks or guidelines. The Ministry said it "will engage the insurers, healthcare providers, policyholders and patients in further discussions to carefully study the recommendations" (direct quote from Channel News Asia 2016). In January 2018, MOH set up a 13-member Fee Benchmarks Advisory Committee chaired by Dr. Lim Yean Teng and tasked the entity to construct national benchmarks for medical services charges. The Committee's members "include medical doctors, academics and representatives from the Government, as well as insurance and non-profit sectors" (Lai 2018). The primary focus of the Committee's investigation was common surgical procedures which account for 80-85 percent of services charges by hospitals (Cheng 2018). The entity's report submitted to MOH on 5<sup>th</sup> November 2018 recommended the

<sup>11</sup> Interview with a Singaporean scholar and former official involved in the country's medical tourism policy, Singapore, 19 April 2019.

imposition “of fee benchmarks for private specialists’ professional fees (excluding an anesthesiologist’s fee and GST) for surgical procedures” (Fee Benchmarks Advisory Committee 2018, p. 9). As a result, on 13<sup>th</sup> November 2018 MOH published the price guidelines for surgical procedures in private facilities such as heart bypass and knee replacement (Baker 2018). These rules allow physicians to charge patients for their services within a specified range. If the doctor charges more than 50 percent above the maximum band, he must provide rationales for doing so. MOH is mandated to monitor the implementation and collect the data for policy assessments and future policy planning<sup>12</sup>. At the time of this writing, the Ministry is examining how to set cost-containment measures for other types of fees (Baker 2018). According to the Senior Minister of State for Health and Transport, Dr Lam Pin Min, the government might conduct another review on additional fees namely consultation and anaesthetist fees in 2019 or 2020 (Choo 2018). Additionally, to further tame down the citizens’ criticism about the use of public healthcare facilities for medical tourism purposes, MOH in September 2018 ordered all public hospitals to terminate foreign patient referral contracts in September 2018 (Lim 2018b).

Aiming to address a bed shortage problem, the Singaporean officials planned to elevate the roles of community hospitals in the public healthcare system. It is because such hospitals are usually located in residential areas, boosting the residents’ access to healthcare. As a result, they are often the top destination for the locals to go to when they are sick. Some “community hospitals are physically linked to general hospitals, so help is at hand should there be a medical emergency” (Khalik 2015b). In short, for serious cases patients can get referrals from community hospitals to receive additional care at acute hospitals. Also, community hospitals provide cheaper options for the citizens in terms of treatment and rehabilitation (Khalik 2015b). Moreover, these facilities help free up beds at general hospitals so that the latter do not have to postpone non-emergency surgeries due to bed shortage. For these reasons, the authorities are keen to enhance community hospitals’ role in caring for the population in the future. Illustratively, Health Minister Gan Kim Yong remarked the Healthcare 2020 Masterplan aimed at delivering more accessible and affordable quality healthcare services to all citizens will “shift the centre of gravity from acute hospitals to the community” (Khalik 2016a).

In terms of alleviating a brain drain problem, Singapore recruited foreign healthcare personnel (e.g. doctors, dentists, pharmacists) to fill the manpower gap in its public facilities. For instance, the state signed onto ASEAN Mutual Recognition Agreements (MRAs) with other nine Southeast Asian nations. These Agreements are aimed at facilitating the movement of skilled labour and trade in services among 10 ASEAN economies. MRAs on medical, dental, and nursing professionals were endorsed by Singapore in 2009, 2009, and 2006 respectively. In short, such MRAs allow the Singaporean healthcare providers to recruit qualified medical-related personnel from abroad to better cater healthcare services to its population.

There exist formal procedures and requirements (e.g. accreditation, professional examinations, language proficiency) for granting and renewing licenses of these professionals to ensure that these individuals possess sufficient knowledge and experience before being permitted to work in the country. For example, international physicians trained overseas are eligible to work in Singapore when they successfully apply for medical registration after fulfilling the followings: (1) hold a basic degree from a university listed in the Second Schedule of the Medical Registration Act or a

<sup>12</sup> Interview with a Singaporean scholar and former official involved in the country’s medical tourism policy, Singapore, 19 April 2019.

post-graduate speciality qualification recognized by the Specialist Accreditation Board (SAB); (2) have been selected to work in a healthcare facility approved by Singapore Medical Council (SMC) via the letter of employment; (3) have been active in clinical practice for 3 years before the application; (4) (if applicable) pass a national licensing test<sup>13</sup> from a university listed in the Second Schedule of the Medical Registration Act or a post-graduate specialty qualification where the degree was conferred; (5) are certified to be in good standing by an overseas regulatory body or a medical council in the country where the applicant has been practicing for the preceding 3 years. The certification date must not exceed 3 months from the issuance date; (6) if the training was conducted in languages other than English, pass English language proficiency (IELST- at least 7 of all components (i.e. Listening, Reading, Writing, Speaking), TOEFL - at least 250 marks for computer-based or 600 marks for paper-based or 100 marks for internet-based, or Occupational English Test (OET) - at least Grade B in all components in a sitting test) (Singapore Medical Council 2018a; Singapore Medical Council 2018b).

As for foreign dentists, they are eligible to work in Singapore if they fulfil the followings: (1) hold a basic degree from a university listed in the Second Schedule of the Medical Registration Act, or other degrees not lower in standing of the Schedule (subject to Singapore Dental Council (SDC)'s approval); (2) have been selected to work in a dental facility approved by SDC; (3) (for individuals holding a basic degree from a university listed in the Second Schedule of the Medical Registration Act) pass a national licensing test where the degree was conferred; and (4) (for individuals holding other degree not lower in standing of the Schedule) sit and pass a qualifying exam<sup>14</sup> administered by SDC. These licensing policies have boosted the size of the city-state's healthcare workforce. For instance, in 2017, 1,583 (or 17.11 percent) of the total 9,521 medical practitioners are non-Singaporeans working in the public healthcare sector (Singapore Medical Council 2017). In addition to granting professional licenses to foreign healthcare personnel, MOH has increased the enrollment of Singaporean medical students (Ngiam 2013). The Ministry has attracted foreign-trained Singaporean medical students to return and work in the country by offering to subsidise their final three years of study (Khalik 2015a).

Furthermore, to ensure that the rules and regulations continue to be effective in governing the country's medical tourism and healthcare system, MOH in January 2018 proposed to replace the current Private Hospitals and Medical Clinics Act (PHMCA) with a new Healthcare Services Act (HCSA). Originally enacted in 1980 and last amended in 1999, PHMCA is "to provide for the control, licensing and inspection of private hospitals, medical clinics, clinical laboratories and healthcare establishments" (PHMCA 1999). The HCSA mandates MOH to oversee "the licensing and quality of hospital services and other medical establishment" (Grosse 2016). In 2018, MOH revealed that this new legislation was driven by the government's desire to "safeguard patient safety and welfare, strengthen regulatory clarity, enhance governance of healthcare providers and ensure continuity of care and accountability" (Khalik 2018), and better regulate private medical practices in a changing environment (Grosse 2016). The bill is slated to be enacted by December 2019 in three phases according to the following timelines. During Phase I which will be from December 2019 onwards,

<sup>13</sup> The national licensing test on physician's capability and professional knowledge can be in English or non-English language. As long as it is provided by the institutions under the Second Schedule of the Medical Registration Act or a post-graduate specialty qualification, this condition regarding the national licensing test is fulfilled.

<sup>14</sup> The exam is offered in English only. The exam fee is S\$ 2000. The candidates are allowed 2 attempts and both attempts must be taken within 12 months of each other.

existing PHMCA-licensed medical and dental clinics, and laboratories will come under the Act. During Phase II which will take place from June 2020 onwards, all PHMCA-licensed hospitals and nursing homes will come under the HCSA. During Phase III which will occur from December 2020 onwards, new services such as Telemedicine will come under this new law (Ministry of Health Singapore 2018a).

While HCSA reflects the government's desire to amend rules and regulations to work better for new technologies and innovation in the healthcare sector, one could argue that the authorities wanted this Act to better regulate the private healthcare sector and curb the future adverse impacts of medical tourism. To elaborate this point, the Act allows the government to expand its regulatory control over the nation's healthcare system more broadly compared to the current PHMC. Illustratively, the latter governs only physical facilities, but the HCSA will regulate both physical and virtual care such as Telemedicine. Moreover, the HCSA will require all healthcare institutions such as laboratories to input patients' data into the National Electronic Health Records (NEHR). Additionally, the HCSA imposed tougher punishment on non-compliance than the previous PHMCA by raising the penalty charges for those violating the regulations such as individuals with no medical license providing services. In sum, these above measures were put in place to ameliorate the undesired impacts of medical tourism on Singapore's healthcare system. Consequently, such policies allowed the city-state to continue exporting its healthcare services and maintain itself as a key player in the world's medical tourism market.

## 5. Conclusions

This article scrutinizes the role of a central government in shaping medical tourism. The analysis of the Singapore case has validated my argument that the country's medical tourism was a product of the authorities' effort to manage the trade-off. In other words, the government implemented certain schemes to encourage medical tourism and rolled out particular measures to alleviate the negative consequences of medical tourism on the public healthcare system. Such policies enabled the nation to continue reaping the benefits of medical tourism and providing accessible quality healthcare to its citizens.

Some lessons which are useful for other countries wanting to develop or enhance their medical tourism industry can be extracted from this research. As the case study has revealed, a central government can promote the industry in several ways. First, it can grant a long-stay visa for foreign patients in need of extended treatments. Also, public authorities can make available a dispute settlement system for medical tourists. Such the system in place reassures these individuals that they are protected under the country's laws and regulations, which in turn attracts more medical tourists. In addition, the government can encourage inward and outward investment in the healthcare sectors by providing incentives to entrepreneurs in forms of, but not limited to, tax exemptions and deductions, and helping them get access to finance.

The government can roll out certain measures to alleviate the undesired consequences of medical tourism on the country. For instance, it can provide subsidies (as seen in Medifund) or set up saving and insurance schemes (as reflected by Medisave and MediShield Life respectively) to help its citizens cover their healthcare expenditures. Also, public authorities can impose price guidelines to control fees levied by healthcare providers, which can ultimately curb soaring medical costs. Another way which the government can do to accomplish accessible healthcare is boosting the roles played by community hospitals in the national healthcare system. Furthermore, as part of their

effort to address a brain drain problem, public officials can increase the enrollment of medical students and attract foreign-trained ones to return to work in the country by offering to subsidise their medical education. In addition, the government can amend laws and regulations to make them up to date with new technologies and innovations used in the healthcare system (e.g. telemedicine). Doing so accordingly increases the authority's ability to govern medical tourism.

The study contains certain shortcomings, leaving room for future research. For example, it does not examine how the interactions between domestic and international rules and regulations affect the policy formulation of the Singaporean government. For one thing, the requirements at the World Health Organization or other arrangements that the country pledged to comply could constrain the officials' ability to devise certain measures to help lessen the adverse effect of medical tourism. Also, this research does not investigate the roles of events such as the Severe Acute Respiratory Syndrome (SARS) outbreak in 2003 in affecting the government's healthcare policies which in turn shaped the nation's medical tourism. Interested scholars should scrutinise these matters as doing so will enhance the understanding about how governments influence the development of states medical tourism industry.

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