

# Trends in Southeast Asia



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Trends in  
Southeast Asia

THE PRIVATE HEALTHCARE SECTOR  
IN JOHOR: TRENDS AND PROSPECTS

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# FOREWORD

The economic, political, strategic and cultural dynamism in Southeast Asia has gained added relevance in recent years with the spectacular rise of giant economies in East and South Asia. This has drawn greater attention to the region and to the enhanced role it now plays in international relations and global economics.

The sustained effort made by Southeast Asian nations since 1967 towards a peaceful and gradual integration of their economies has had indubitable success, and perhaps as a consequence of this, most of these countries are undergoing deep political and social changes domestically and are constructing innovative solutions to meet new international challenges. Big Power tensions continue to be played out in the neighbourhood despite the tradition of neutrality exercised by the Association of Southeast Asian Nations (ASEAN).

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# The Private Healthcare Sector in Johor: Trends and Prospects

By Meghann Ormond and Lim Chee Han

## EXECUTIVE SUMMARY

- The future of the private healthcare in Johor and in the Iskandar Malaysia (IM) special economic zone in particular is intimately tied to larger property developments and trends in the region, both because private healthcare developers are increasingly the same as property developers and because IM's future population growth relies heavily on corporate settlement in IM and the jobs that such settlement generates. Volatility in corporate investment and settlement in IM may have significant consequences for the sector's development.
- The Federal and Johor State Governments intend to turn IM into a world-class private healthcare destination for local residents and foreign visitors alike. A range of strategies and policies have been launched to develop IM's medical care, aged care, and lifestyle and well-being sectors.
- It is essential to track the impact of federal and regional fiscal incentives for private healthcare development and monitor actual demand for private sector capacity in order to assess the value and utility of such incentives, especially given the potential for such incentives policies to promote the generation of excessive private sector hospital and clinical capacity if left unchecked.
- Private healthcare providers in the region depend mostly on local residents as their consumer base because Johor and IM are not (yet) significant medical tourism destinations. Given the current rate of expansion of existing hospitals and construction of new ones in Johor and specifically in IM, local demand must be secured via measures that increase the Johor household income base, foster

interstate migration, attract higher income talent in larger numbers to live in the region, and improve quality of life in the region.

- To strengthen medical tourism, private players — both large and small — require greater coordination and cooperation at the regional level in promoting medical tourism and in setting up centres of excellence and medical tourist-friendly services that cater to the actual needs of international patients.



# The Private Healthcare Sector in Johor: Trends and Prospects

By Meghann Ormond and Lim Chee Han<sup>1</sup>

## INTRODUCTION

The Iskandar Malaysia (IM) special economic zone (SEZ) was established in Malaysia's southernmost state, Johor, in 2006 and is now beginning its third and final phase of development, with a targeted completion in 2025. IM is jointly operated and regulated by the Malaysian federal government and Johor state government under the statutory body called Iskandar Regional Development Authority (IRDA), which is charged with the development of IM as a "strong and sustainable metropolis of international standing" (IRDA 2016*a*). To do this, IRDA focuses on economic sector and infrastructural planning, the promotion of IM to the general public and potential investors, and coordinating and facilitating investment in the SEZ. It promotes nine economic sectors within IM: healthcare, financial and business services, tourism, education, logistics and creative services make up the service sector, while electrical and electronics, petrochemical and oil and gas, and food and agro-processing comprise the manufacturing sector. From IM's inception in 2006 to mid-2016, the manufacturing sector (27 per cent), retail/mixed-development (26 per cent) and residential property segments (20 per cent) comprised the bulk of investment in IM, with the services sector accounting for only 8 per cent during that period (IRDA 2016*a*, p. 64). Healthcare made up only 1 per cent of total investment, or RM3.16 billion, in the same period (IRDA 2016*a*, p. 65).

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Despite its relative insignificance in the SEZ's broader investment portfolio, healthcare — a driver for other health-related industries (e.g., biotechnology, medical devices and equipment, pharmaceuticals and education) — has been thought to be a more solid and steadier growth catalyst over the last decade than other projects that IRDA initially saw as significant growth catalysts (Whang and Lim 2016). This is due in part to healthcare, like schools and transport infrastructure, functioning as a key infrastructural anchor and “enabler” to render retail/mixed-development and residential property development more attractive to investors and consumers.

In the following pages, we provide a contemporary snapshot of the key policies and players shaping the development of private healthcare in Johor in order to inform policymakers, current commercial stakeholders and potential investors, and residents and civil society actors in the region about the latest trends, concerns and opportunities linked to the private healthcare sector in Johor. We also offer an overview of healthcare demand, facilities and human resources available in Johor that enables readers to compare the dimensions and competitiveness of Johor's private healthcare services sector with other key leading states in Malaysia. This information draws on documentary sources, interviews with key private health and aged-care sector representatives, and participant observation. We wrap up the report with reflections on the future challenges and opportunities the private healthcare services sector faces in Johor.

## **POLICIES**

The private healthcare services sector is a significant contributor to the Malaysian economy, equivalent to 1.4 per cent of the country's total GDP (2015).<sup>2</sup> The Economic Transformation Programme (ETP), launched in 2011 and focused on transforming Malaysia into a high-income country by 2020, recognizes this sector's significance and potential. Earmarked as one of the ETP's twelve National Key Economic Areas (NKEAs), the

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<sup>2</sup> Authors' calculation is based on the data obtained from the Economic Census 2016 (Department of Statistics Malaysia, 2017b) and Department of Statistics Malaysia.

private healthcare sector is expected to create 26,966 jobs and generate RM6.59 billion by 2020 (Pemandu 2013*b*). The ETP's Healthcare NKEA focuses on medical devices and equipment, clinical and pharmaceutical research and product development, diagnostic services, health insurance for foreigners, medical tourism and senior living (Pemandu 2013*a*). Of these, most relevant to IM is medical tourism and senior living. The Wholesale and Retail NKEA should also not be ignored, as one of its foci — wellness — intersects with private healthcare services in developments throughout Malaysia. In this section, therefore, we outline the contours of the main national policies shaping the development of private medical care, ageing, and wellness and lifestyle services in Johor and, more specifically, in IM.

### *Private Medical Care*

Malaysia's changing epidemiological and demographic profiles have been used in recent decades by the federal government to frame publicly financed healthcare as increasingly financially unsustainable. In the 1980s and 1990s, the Malaysian healthcare system began the process of privatization and corporatization. With the growth of Malaysia's middle class and neoliberal policy reform favouring privatization, private hospitals have since expanded in size and number throughout the country (Chee and Barraclough 2007). The introduction and enforcement of the Private Healthcare Facilities and Services Act (PHFSA) of 27 August 1998 (Commissioner of Law Revision Malaysia 1998) reflects the government's recognition of the private healthcare sector's growing significance in Malaysia from the late 1990s onwards. The PHFSA regulates private healthcare facilities and services by ensuring quality, setting fee ceilings and monitoring compliance.

The Malaysian private healthcare market is subject to national, regional and global economic volatility. The Asian financial crisis in the late 1990s, for example, left many private hospitals with fewer patients when many middle-class Malaysians again turned to the public sector to meet their healthcare needs. In 1998, therefore, the federal government also recognized the potential of the foreign patient market (so-called "medical tourism") to support private healthcare providers in Malaysia, especially during moments of economic crisis. From that point onwards,

the federal government has fostered medical tourism via promotional campaigns, land grants and fiscal incentives (Ormond 2013). Since 2009, the corporatized national promotional body Malaysia Healthcare Travel Council (MHTC) has assumed responsibility for the coordination and promotion of Malaysian hospitals as medical tourism destinations.

The ETP's "Reinvigorating healthcare travel" Entry-Point Project has further enshrined medical tourism as a national economic driver. Under the Income Tax (Exemption) Order 2012 (renewed by Parliament in 2017), companies anywhere in Malaysia that establish new private healthcare facilities or existing private healthcare facilities undertaking expansion, modernization or refurbishment for purposes of promoting medical tourism are eligible to apply for an Income Tax Exemption equivalent to an Investment Tax Allowance (ITA) of 100 per cent on the qualifying capital expenditure incurred within a period of five years (MIDA 2011). The ITA has been extended until 31 December 2020, following the announcement of the 2018 Federal Budget of the Malaysian government (*New Straits Times* 2017). The government also announced an increase in the medical tourism incentive from 50 per cent to 100 per cent of the incremental value of private healthcare services exports, from the year of assessment (2018) to 2020 in the Budget. We outline in detail how Johor and IM are specifically affected by the government's pro-healthcare privatization policies in later sections of this report.

### *Ageing*

Some 15 per cent of the Malaysian population will be aged 60 and above by 2035, a figure which will grow to 23.6 per cent by 2050 (Alfian 2017). It is estimated that three-fourths of Malaysians are not saving enough for retirement and few have sufficient funds to cover the costs of long-term care needs (i.e., medical and non-medical needs associated with chronic illness, disability and dependency) (EPF Annual Report 2016). Furthermore, while demographic changes have extended life expectancy among Malaysians, economic transformations within the country have led to the growth of nuclear families and dual-earner households and the decline of multi-generational households, leaving many older people without the intergenerational care upon which previous generations

relied. Yet, the Malaysian government has only recently started to prepare for population ageing, having few policies in place to address its specific medical and long-term care needs (e.g., the National Health Policy for Older Persons and Plan of Action for Older Persons and the National Plan of Action for Health Care of Older Persons (Ruhaini 2013)). Commentators in the national press argue for the need for greater public–private collaboration to reduce care costs associated with ageing, like institutional care services, retirement homes, products and services for senior living, and long-term care insurance coverage (see, e.g., Yip, in Khairani 2017).

There is growing worldwide recognition that conventional institutional care homes pose challenges to supporting care-dependent seniors’ quality of life (Gawande 2014), resulting in a push to enable seniors to live in their own homes for as long as possible. However, despite the continuing stigma in Southeast Asia associated with outsourcing elder care due to beliefs about filial piety (Ormond 2014), there appears to be a growing lobby to develop and transform private-sector aged-care facilities in Malaysia (see, e.g., the Aged Care Group 2016). Indeed, in 2014, the Malaysian government identified a need for

appropriate facilities, professional care and the availability of trained care givers to look after this increasing segment of population.... While still a new concept in Malaysia, the seniors living sector offers great potential growth and can help address the outpatient and community-based care needs of the elderly. It allows for seniors to live in a respectable and dignified facility allowing them to “age-in-place” in a secured environment where they can remain active and socially connected and be assured of care when the need arises. (Pemandu 2014).

Yet the government is not only interested in responding to Malaysian nationals’ growing elder care needs. There is also clear interest in complementing Malaysia’s growing medical hub status with senior living and aged-care facilities and in using public–private partnerships to do so, catering to both middle-class Malaysian nationals and international retirement migrants in the Malaysia My Second Home

(MM2H) programme. The ETP places specific emphasis on senior living and aged-care facility models imported from abroad (e.g., Singapore and Australia) “to answer this pressing need for quality and dependable senior active living and aged care which can be sustainable in the long term under a non-government funded or non-welfare regime” (Pemandu 2014). How this manifests in Johor and IM can be seen in later sections.

Currently, most long-term care in Malaysia is offered by government welfare homes, private nursing homes, private care centres, voluntary aged-care organizations and charitable centres. However, most of these are thought to be unlicensed. Recognizing a need for care standards to be streamlined and standardized, the ETP Healthcare NKEA’s “Institutional aged care” Entry-Point Project led to the development of new specific legislation that builds on the Private Healthcare Facilities and Services Act (PHFSA) of 27 August 1998 and the Care Centre Act (CCA) of 7 July 1993 (Commissioner of Law Revision Malaysia 1993) to further regulate and monitor aged-care centres throughout the country and identify skills requirements for employed caregivers.<sup>3</sup> The resulting Private Aged Healthcare Facilities and Services Bill (PAHFSB) of 29 November 2017 (previously the Aged Healthcare Act) requires private elderly care centres (i.e., private centres caring for four or more people aged 60 and above) to possess an operating licence issued by the Ministry of Health and renewable every three years. Private aged-care centre operators must ensure that caregivers working on their premises hold the Malaysian Skills Certificate (SKM) and are trained in basic life support. Premises must be built in accordance with standards set by the Ministry of Urban Wellbeing, Housing and Local Government. Operators are to be subject to inspection and, in cases of non-compliance, liable to fines. Unlike with the PHFSA, however, the government has not set a fee ceiling on private aged care, though this may be considered in the future (Carvalho et al. 2017).

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<sup>3</sup> The PHFSA only covers healthcare services provided in hospitals, clinics and diagnostic centres and, while the CCA covers childcare, rehabilitation centres and elderly care homes, limited enforcement has meant that care quality is highly variable.

## *Wellness and Healthy Lifestyles*

Businesses around the world are increasingly seeking to tap into the rapidly growing “Lifestyles of Health and Sustainability” (LOHAS) market segment focused on the elusive concept of “wellness”, which involves health and fitness, the environment, personal development, sustainable living and social justice (Emerich 2011). The industry offers goods and services linked to complementary and alternative medicine (CAM), preventive and personalized medicine, fitness and mindfulness, healthy eating and weight loss, beauty and anti-ageing, spa and thermal/mineral springs, and “wellness lifestyle” real estate and tourism.

The Malaysian government and diverse commercial actors aligned with the mission of developing Malaysia as a care hub have increasingly developed strategies to capture, expand and capitalize on the LOHAS market segment in the fields of healthcare; lifestyle, wellness and active ageing; and assisted living and institutionalized aged care. This is evidenced by the Wholesale and Retail NKEA “Setting up wellness resorts” Entry-Point Project, which “aims to establish wellness resorts at strategic locations ... to tap into the booming medical tourism industry” (Pemandu 2013a). In Kuala Lumpur, for instance, the Country Heights Group is developing a 120-acre “integrated health and wellness resort” called Mines Wellness City (MWC), which will include hospitals, specialist clinics, aged-care facilities, a health-screening centre, residential units, office spaces and retail space. It was gazetted as a Special Wellness Zone by the federal government, entitling developers, operators, managers and promoters that provide healthcare- and wellness-related facilities or services to tax incentives.

In Johor, where it is expected that IM will be home to 3 million residents by 2025 (double its 2006 population), the IRDA has identified a handful of programme areas to improve the SEZ’s liveability, such as “integrated health facilities improvement” and “healthy lifestyles” (IRDA 2014, p. 6). This has led to the launch of IM’s “Smart Healthy City and Communities” programme as well as a slew of developments in IM billing themselves as “health and wellness” destinations for well-heeled older people. Examples of these will be described in greater detail below.

## CURRENT HEALTHCARE SERVICES IN JOHOR

According to the Economic Census 2016, the gross output value of health services in Johor in 2015 was RM1.55 billion, or 1.5 per cent of the state GDP (Table 1). Hospitals contributed about half (Table 2). While the contribution to state GDP is higher than the national average, it is lower than the most significant medical tourism destination states (e.g., Melaka, 2.1 per cent; Pulau Pinang, 2.4 per cent; Selangor, 1.7 per cent; and the Federal Territory of Kuala Lumpur, 2.1 per cent). From 2010 to 2015, the size of the private health sector in Johor grew 60.7 per cent, compared to 44 per cent in GDP (Figure 1), indicating that the sector's growth is faster than general growth of the state economy. In 2015, 9,967 people were employed in health services in Johor across 1,254 establishments. Of these, 44.3 per cent were employed by 32 hospitals.<sup>4</sup>

From 2010 to 2015, 412 new health service establishments were set up in Johor and gross output increased by 60.7 per cent, faster than Melaka (49.8 per cent), Pulau Pinang (43.5 per cent) and the Federal Territory of Kuala Lumpur (57.3 per cent). Six hospitals opened in Johor during that time, while four closed in Pulau Pinang and one opened in Melaka. However, if we look at value added over value of gross output, an indicator of efficiency and profitability, we see that Johor only achieved 45.5 per cent (39.6 per cent for hospitals) in 2015, lower than the national average and other key states (Tables 1 and 2). This indicator could be a concern for potential healthcare investors coming to Johor. Yet it could also present an opportunity for investors to develop the sector from the lower baseline if operators are confident in their market efficiency and believe that they could outperform their competitors in Johor.

### *Healthcare Facilities and Capacity*

While there has been steady growth in the numbers of public health clinics, private medical clinics and dental clinics in Johor over the years,

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<sup>4</sup> The difference in the number of hospital institutions is due to different definitions used by the Department of Statistics and Ministry of Health Malaysia.



**Table 1: Principal Statistics of Health Services by Selected States, 2010 and 2015**

	No. of establishments			No. of persons engaged (during December of last pay period)			Value of gross output, RM million			% Value added/ Value of gross output			% Value of gross output/ State GDP		
	2010	2015	% Change	2010	2015	% Change	2010	2015	% Change	2010	2015	% Change	2010	2015	% Change
MALAYSIA	6,739	11,018	63.5%	77,742	101,056	30.0%	10,052	16,218	61.3%	45.8%	47.2%	1.4%	1.2%	1.4%	0.18%
Johor	842	1,254	48.9%	7,729	9,967	29.0%	963	1,548	60.7%	41.8%	45.5%	3.7%	1.3%	1.5%	0.15%
Melaka	275	418	52.0%	3,936	4,558	15.8%	508	761	49.8%	41.5%	51.0%	9.5%	2.1%	2.1%	0.05%
Pulau Pinang	517	909	75.8%	9,219	11,143	20.9%	1,299	1,864	43.5%	47.8%	45.6%	-2.2%	2.5%	2.4%	-0.01%
Selangor	1,617	2,779	71.9%	20,630	25,912	25.6%	2,555	4,428	73.3%	44.9%	48.5%	3.6%	1.4%	1.7%	0.24%
F. T. Kuala Lumpur	937	2,022	115.8%	13,318	20,169	51.4%	2,378	3,740	57.3%	48.6%	47.7%	-0.9%	2.1%	2.1%	0.01%

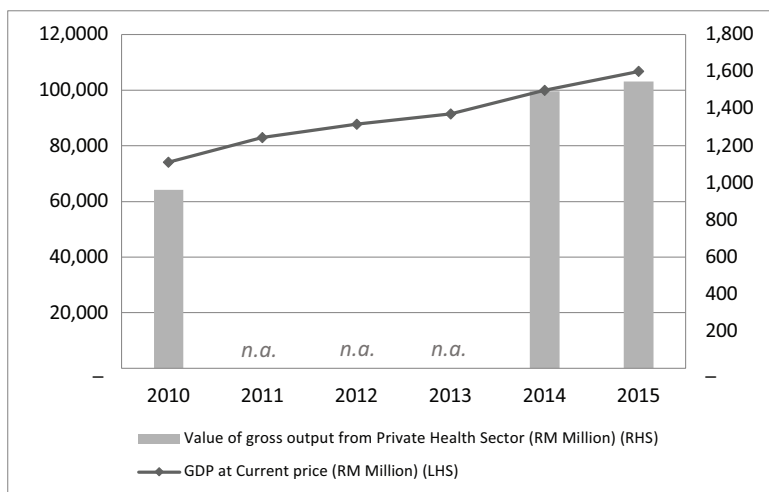
Source: *Economic Census 2016* (Department of Statistics Malaysia, 2017b) and authors' calculations.

**Table 2: Principal Statistics of Hospital Services by Selected States, 2010 and 2015**

	No. of establishments			No. of persons engaged (during December of last pay period)			Value of gross output, RM million			% Value added/ Value of gross output			% Value of gross output (hospital services/ total health services)		
	2010	2015	% Change	2010	2015	% Change	2010	2015	% Change	2010	2015	% Change	2010	2015	% Change
MALAYSIA	198	232	17.2%	37,273	46,362	24.4%	5,995	9,007	50.2%	41.0%	42.4%	1.5%	59.6%	55.5%	-4.10%
Johor	26	32	23.1%	2,704	3,901	44.3%	514	749	45.8%	34.0%	39.6%	5.6%	53.4%	48.4%	-4.95%
Melaka	4	5	25.0%	2,378	2,426	2.0%	329	428	30.0%	31.3%	43.6%	12.3%	64.8%	56.2%	-8.57%
Pulau Pinang	25	21	-16.0%	6,539	7,316	11.9%	1,046	1,290	23.3%	45.5%	40.3%	-5.2%	80.5%	69.2%	-11.31%
Selangor	48	60	25.0%	10,477	11,338	8.2%	1,547	2,438	57.6%	39.0%	44.9%	5.9%	60.5%	55.1%	-5.49%
F. T. Kuala Lumpur	41	46	12.2%	7,057	9,663	36.9%	1,461	2,231	52.7%	47.4%	44.9%	-2.5%	61.4%	59.7%	-1.80%

Source: *Economic Census 2016* (Department of Statistics Malaysia, 2017b) and authors' calculations.

**Figure 1: Johor's GDP and Private Health Sector Size**



Source: *Economic Census 2016* (Department of Statistics Malaysia, 2017b).

the actual number of Johor private hospitals has been on the decline, dropping from thirty-eight hospitals in 2008 to twenty-one in 2014 (Table 3). Despite this, Johor experienced a general increase in total (public and private) hospital bed capacity from 2008 to 2016. Yet one interviewee representing a major private hospital group suggests that, given the forecasted population growth in IM, the number of public and private hospital beds in Johor is not yet sufficient. In 2016, while the number of hospitals per 100,000 population in Johor was comparable with that of Melaka and Selangor (Figure 2) its bed-to-population ratio (174.9 per 100,000 people), though higher than Selangor (145.2), was lower than the national average (188.5) and significantly lagging behind the already well-established medical tourism destinations of Pulau Pinang (250.7), Melaka (251.2) and Kuala Lumpur (439.3) (Figure 3).

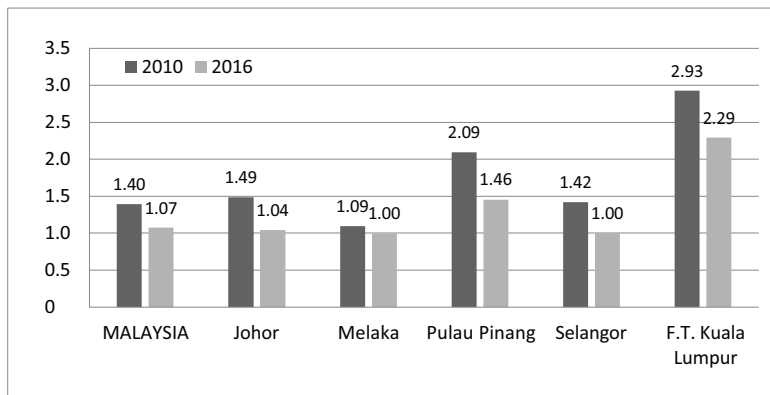
With the predicted population growth in IM, it will be necessary to open more hospitals in IM. Public hospitals will be necessary in Nusajaya and expansion of the existing hospital in Kulai should be considered along with the construction already slated for a new public hospital in

**Table 3: Number of Health Facilities in Johor, 2008–16**

Type of Facilities	2008	2009	2010	2011	2012	2013	2014	2015	2016
Public Hospitals	12	13	13	13	12	12	12	12	12
Private Hospitals	38	37	37	30	27	27	21	25	26
Total Hospitals	50	50	50	43	39	39	33	37	38
Public Beds	4,917	4,953	4,941	5,046	4,766	4,968	4,968	4,968	5,185
Private Beds	1,059	1,070	1,110	1,006	1,025	1,153	831	1,146	1,202
Total Beds	5,976	6,023	6,051	6,052	5,791	6,121	5,799	6,114	6,387
Health Clinics (Public)	87	90	88	94	94	94	94	94	95
Community Clinics (Public)	265	265	267	262	262	262	261	261	261
Maternal & Child Health Clinics (Public)	4	4	3	3	3	3	3	3	3
Medical Clinics (Private)				786	803	821	842	868	894
Dental Clinics (Private)				162	169	173	184	202	211

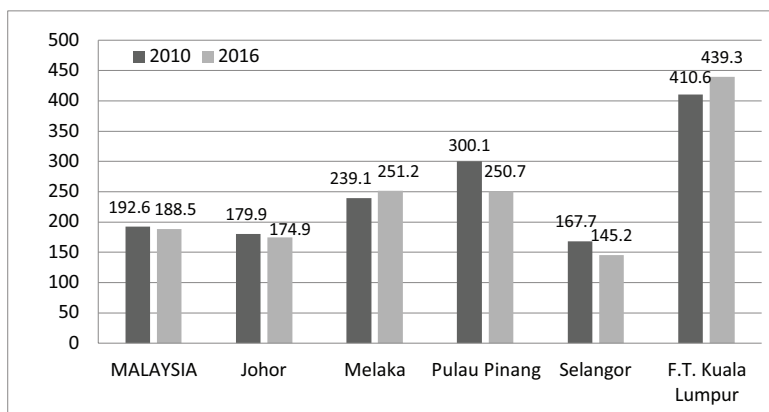
Source: Health Indicators 2008–2017, Ministry of Health Malaysia (Ministry of Health Malaysia, 2017).

**Figure 2: Number of Hospitals per 100,000 population, 2010 and 2016**



Source: Health Indicators, Ministry of Health Malaysia, Department of Statistics Malaysia and authors' calculations (Ministry of Health Malaysia, 2017; Department of Statistics Malaysia. 2017a).

**Figure 3: Number of Beds per 100,000 Population, 2010 and 2016**



Source: Health Indicators, Ministry of Health Malaysia, Department of Statistics Malaysia and authors' calculations (Ministry of Health Malaysia, 2017; Department of Statistics Malaysia. 2017a).

Pasir Gudang (Musa 2014*b*). With 83.8 per cent of all private beds in Johor currently concentrated in private hospitals and specialist clinics in IM (Table 4) and six of Johor's eight MHTC member institutions promoting medical tourism being located in IM,<sup>5</sup> the clustering of private healthcare resources in the SEZ attests to IM's status as the state's foremost healthcare hub. This percentage will grow, as more private hospitals are slated for construction, with two new KPJ hospitals and TMC Life Sciences Bhd's Thompson Medical Centre to be built in the coming years.

### *Healthcare Demand*

From 2010 to 2017, Johor's state population steadily rose from 3,362,900 in 2010 to 3,700,500 in 2017 (Department of Statistics Malaysia 2017*a*). Home to approximately 11.5 per cent of the national population, Johor's demographic profile by age closely resembles that at the national level (Department of Statistics Malaysia 2018) (Figure 4). However, IM's population is expected to grow significantly over the coming decades. When IM was first established, it was home to 1.5 million residents; by 2025, some 3 million people — coming from other parts of Malaysia and abroad — are expected to be living in IM alone (Othman 2017). Also, by 2025, some 799,000 people aged 55 and over will be residing in Johor, accounting for 19.1 per cent of the total state population. Being highly urbanized and complemented with many advanced healthcare and long-term care facilities, it is expected that IM will host the highest concentration of seniors in Johor. This demographic would be expected

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<sup>5</sup> MHTC and the Association of Private Hospitals of Malaysia (APHM) membership affiliation with the Johor hospitals (see Table 4) is often seen as an indicator for any private hospital to be considered serious in promoting medical tourism and enhancing the hospital network, respectively. There are currently 8 MHTC-affiliated and 13 APHM-affiliated hospital members in Johor, among them six are affiliated to both. Nevertheless, a few prominent local independent hospitals such as Kempas Medical Centre, Penawar Hospital Pasir Gudang and Putra Specialist Centre Batu Pahat do not hold affiliations to either, suggesting that they have different value proposition, marketing and operational strategies.

**Table 4: List of Hospitals and Specialist Clinics in Johor According to MHTC and APHM Membership and Location**

	Name of Institution	Located in Iskandar Malaysia?	Membership		No. of Beds*	Notable Ownership
			MHTC (Sept 2017)	APHM (June 2016)		
1	Gleneagles Medini	Yes	Ordinary		300	IHH
2	KPJ Bandar Maharani Specialist Hospital	No	Ordinary	Yes	63 <sup>#</sup>	KPJ
3	KPJ Johor Specialist Hospital	Yes	Ordinary	Yes	252	KPJ
4	KPJ Pasir Gudang Specialist Hospital	Yes	Ordinary	Yes	136	KPJ
5	Pantai Hospital Batu Pahat	No	Ordinary	Yes	106	IHH
6	KPJ Puteri Specialist Hospital	Yes	Ordinary	Yes	158	KPJ
7	Regency Specialist Hospital	Yes	Ordinary	Yes	218	HMI
8	TMC Fertility & Women's Specialist Centre (Johor)	Yes	Ordinary			TMC Life Sciences
9	Columbia Asia Hospital Iskandar Puteri	Yes		Yes	80	Columbia Asia
10	KPJ Kluang Utama Specialist Hospital	No		Yes	30	KPJ
11	Medical Specialist Centre (JB) Sdn Bhd	Yes		Yes	45	

*continued on next page*

**Table 4 — cont'd**

	Name of Institution	Located in Iskandar Malaysia?	Membership		No. of Beds*	Notable Ownership
			MHTC (Sept 2017)	APHM (June 2016)		
12	Pelangi Medical Centre Sdn Bhd	Yes		Yes	12	
13	Pusat Pakar Perbidanan & Sakitpuan Raja	No		Yes	11	
14	T.K. Tan O&G Specialist Clinic	Yes		Yes	10	
15	Tey Maternity Specialist & Gynae Centre	No		Yes	19	
16	Kempas Medical Centre	Yes			130	
17	Putra Specialist Batu Pahat	No			84	
18	Penawar Hospital Pasir Gudang	Yes			80	
19	Penawar Hospital Pandan City	Yes			200	
20	ECON Medicare Centre (Nursing Home)	Yes			200	ECON Healthcare Group
21	Jeta Care Centre (Nursing Home)	Yes			80	

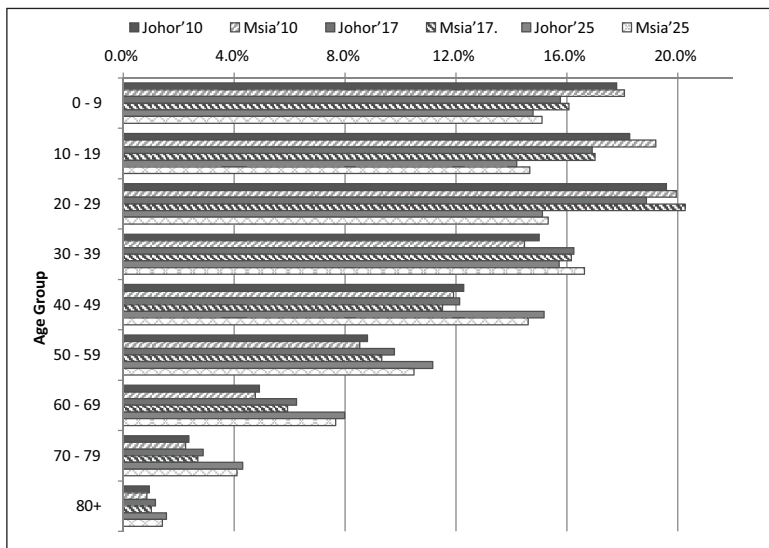
*Notes:* MHTC – Malaysia Healthcare Travel Council; APHM – Association of Private Hospitals of Malaysia.

*Source:* Malaysia Healthcare Travel Council, 2018; The Association of Private Hospitals of Malaysia, 2018 and authors' findings;

\* IM BizWatch, Healthcare @ Iskandar Malaysia: Opportunities in Private Healthcare in Iskandar Malaysia”, April 2016 (IRDA 2016d) and APHM website; # Number is taken from the hospital website.



**Figure 4: Demographic Profile by Age in Johor and Malaysia**

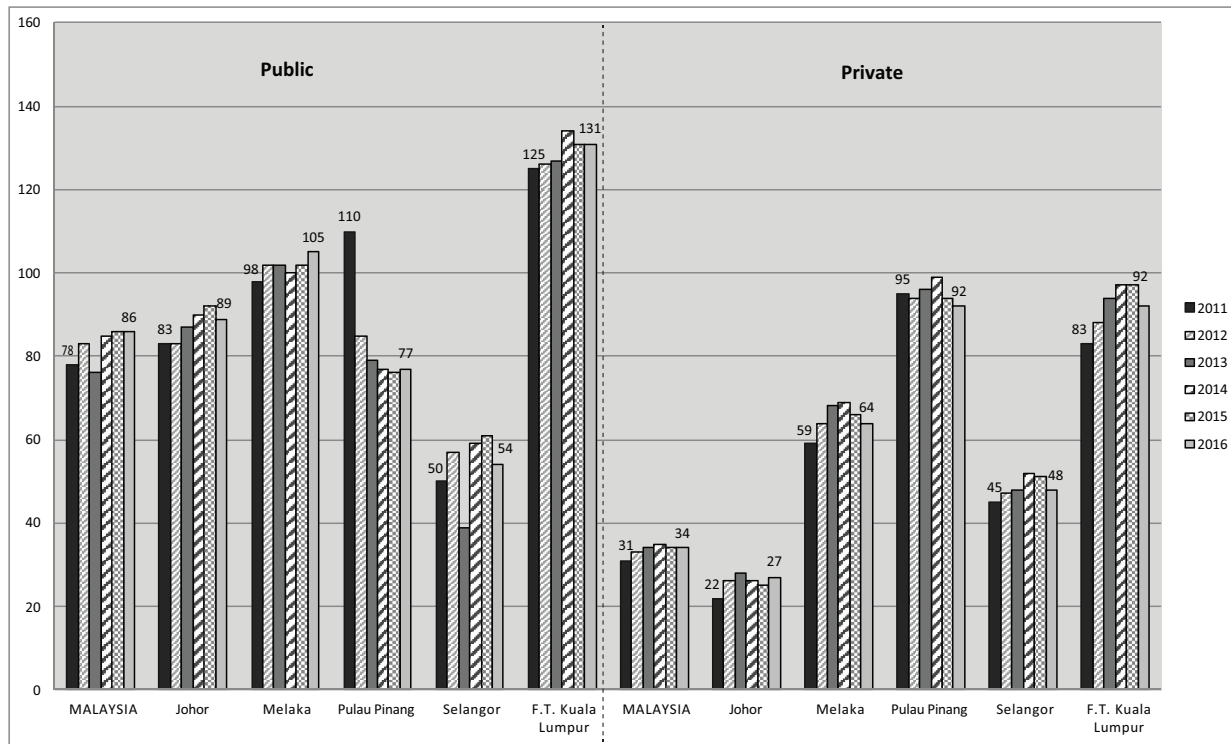


Source: Department of Statistics Malaysia and authors' calculations.

to place significant demands on local healthcare and long-term care services in Johor.

Hospital admissions require the most intensive use of healthcare resources. In both the public and private sectors, hospital admissions (per 1,000 population) across Malaysia are slowly increasing (Figure 5). However, in terms of utilisation of private inpatient healthcare resources, Johor has the lowest private inpatient hospital admission-to-population ratio when compared with Selangor, the Federal Territory of Kuala Lumpur, Melaka and Pulau Pinang (Figure 5). In 2016, Johor residents were three times more likely to be admitted to public hospitals than private ones for inpatient care. The number of inpatients per 1,000 people in Johor (27) was approximately one-third of that in Pulau Pinang (92) and Kuala Lumpur (92). This trend suggests that the private hospital sector has ample room for improvement not only as regards the development of medical tourism but also when it comes to attracting and persuading

**Figure 5: Number of Admissions per 1,000 Population by Selected State, 2011–16**



Source: Health Indicators, Ministry of Health Malaysia, Department of Statistics Malaysia and authors' calculations (Ministry of Health Malaysia, 2017; Department of Statistics Malaysia. 2017a).

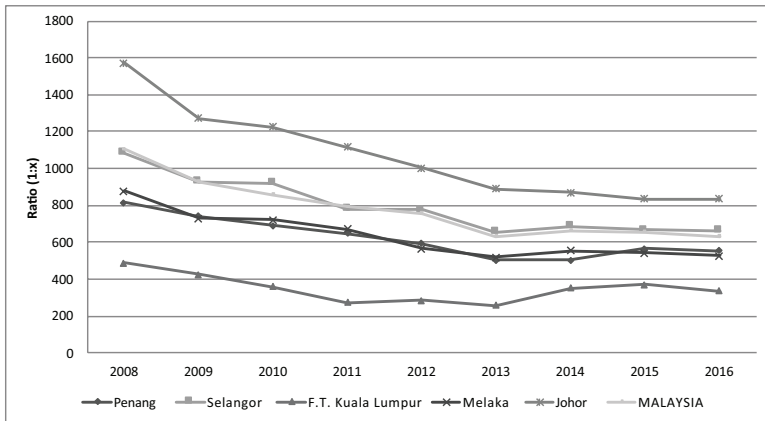
local patients to cross over from public hospitals to make use of private ones.

### *Healthcare Workforce*

Doctors, nurses and pharmacists are the core pillars of the healthcare workforce. Any increase in healthcare capacity would normally require the recruitment of a larger workforce. From 2008 to 2016, the number of doctors in Johor rose across the board, though more substantially in the public sector (from 1,067 to 2,887) than in the private sector (1,085 to 1,496). The state's doctor-to-population ratio has improved tremendously, dropping from 1:1,571 in 2008 to 1:834 in 2016 (Figure 6) and narrowing Johor's gap with other states. However, Johor's doctor-to-population ratio remains higher than Selangor, the Federal Territory of Kuala Lumpur, Melaka and Pulau Pinang (Figure 6). In light of current and future developments in Johor, however, the ratio may drop below the national average. From 2011 to 2016, more nurses began to work in public and private hospitals, leading to a marked improvement in the nurse-to-population ratio from 1:536 in 2011 to 1:368 in 2016 (Figure 7). However, as with the pharmacist-to-population ratio, Johor's ratio remains higher than the national average (Figure 8). In conclusion, the state's healthcare workforce must keep up with the projected rising patient demand by both local residents and medical tourists.

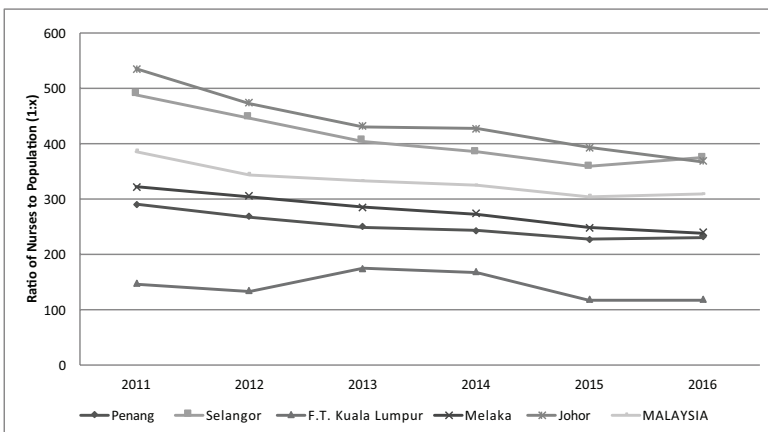
Doctors — especially specialists — are typically private hospitals' most valuable assets for attracting patients. Hospitals' physical size, facilities and finances are the main limiting factors affecting their ability to house a larger number and more diverse range of specialists. Figure 9 compares 15 Johor private hospitals with four private hospitals in the much smaller, neighbouring state of Melaka, which is a well-established, thriving medical tourism destination and Johor's main private healthcare competitor in southern Peninsular Malaysia. Johor private hospitals generally have fewer doctors per hospital than those in Melaka (Figure 9a). Only two Johor private hospitals have 40 or more doctors (i.e., KPJ Johor Specialist Hospital (66) and Regency Specialist Hospital (61)), though Gleneagles Medini (38) is not too far behind. By contrast, Melaka's Mahkota Medical Centre (96) and Pantai Ayer

**Figure 6: Ratio of Doctors to Population by Selected States, 2008–16**



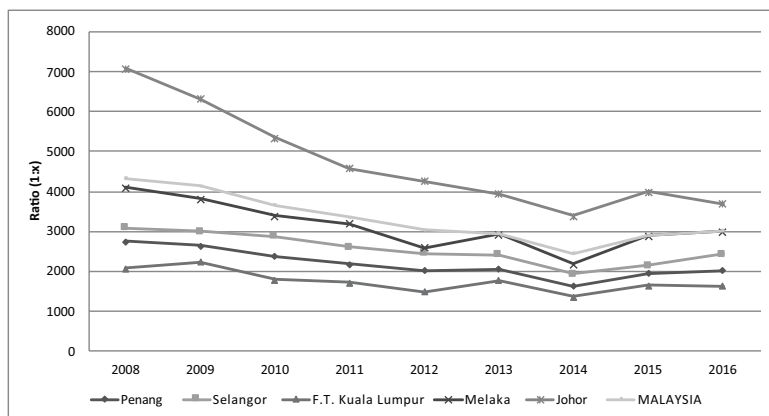
Source: Health Indicators, Ministry of Health Malaysia (Ministry of Health Malaysia 2017).

**Figure 7: Ratio of Nurses to Population by Selected States, 2011–16**



Source: Health Indicators, Ministry of Health Malaysia (Ministry of Health Malaysia, 2017).

**Figure 8: Ratio of Pharmacists to Population by Selected States, 2008–16**



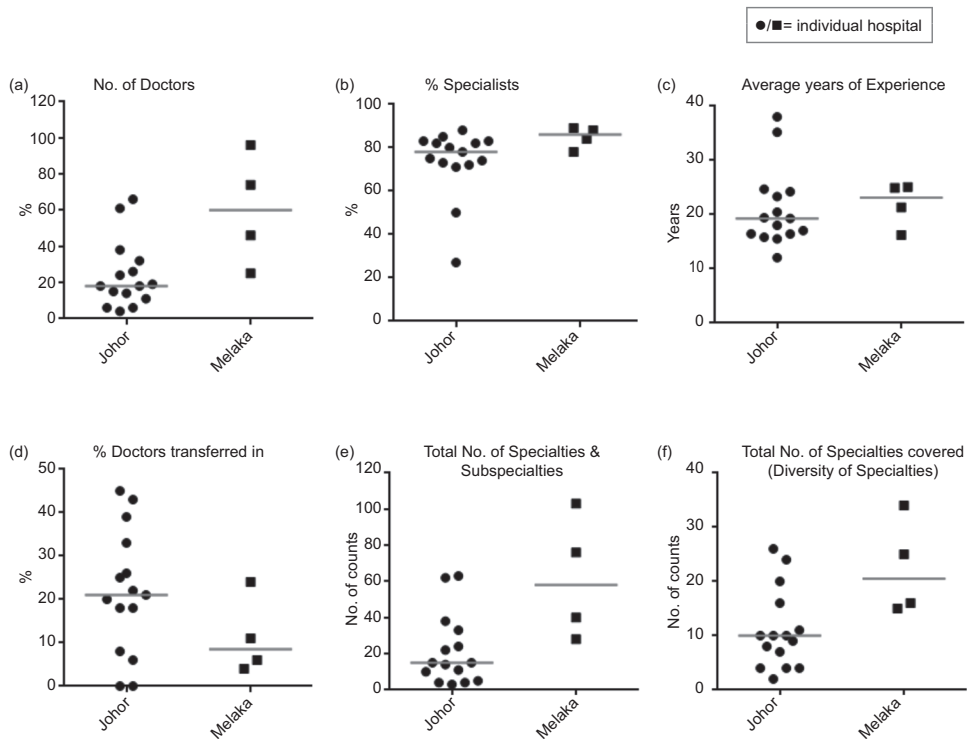
Source: Health Indicators, Ministry of Health Malaysia (Ministry of Health Malaysia, 2017).

Keroh Hospital’s (74) physician workforce is comparable to hospitals in Malaysia’s capital.

Most doctors in Johor and Melaka private hospitals are specialists (70–90 per cent) (Figure 9b). However, Johor still has a lot of catching up to do in order to provide a comprehensive range of specialist care to residents and medical tourists. While KPJ Johor Specialist Hospital (63) and Regency Specialist Hospital (62) lead the pack in Johor for hosting the largest number of specialties, more than half of all Johor hospitals have less than 20 (Figure 9e). Of the 88 specialties and subspecialties areas listed in the National Specialist Register, half of all Johor hospitals have covered less than ten specialty areas and only four of all Johor private hospitals have more than fifteen specialties (Figure 9f). Statistics may skew more towards specialized private medical institutions in the near future in light of a trend towards institutions focused on providing specialty treatment in IM (e.g., the National Heart Institute (IJN) and TLICC which will be discussed in the next section).

Due to the length of specialist training, specialists usually already have several years of experience when recruited by hospitals: a median

**Figure 9: Demographics of Doctors and Specialists in Johor and Melaka Private Hospitals, January 2018**



Source: Medical Register, National Specialist Register and authors' calculations (Malaysian Medical Council 2018a; Malaysian Medical Council. 2018b).

of nineteen years of experience for doctors in Johor and twenty-three for those in Melaka (Figure 9c).<sup>6</sup> Melaka's lower recruitment rate indicates that most specialists have chosen to stay where they are, signalling a stabilized workforce. By contrast, in the last three years, over 20 per cent of all doctors were absorbed by more than half of Johor's private hospitals were responsible for recruiting, due in part to the opening of new hospitals in IM (Figure 9d). Johor hospitals' current recruitment strategies clearly indicate private healthcare expansion in the state, and interviews with major hospital groups suggest that there is growing competition for recruiting and retaining talented specialists.

## HEALTHCARE PLAYERS AND HORIZONS

The Malaysian private healthcare economy is currently believed to be negatively affected by inflation and currency volatility and competition for health human resources (MIDF 2016). However, while cost-sensitive patients may seek out cheaper or public-sector healthcare alternatives, the private healthcare market is held to remain relatively stable because it targets middle- to upper-class populations with higher disposable incomes and are covered by private health insurance (MIDF 2016, p. 4). This belief that private healthcare is and will remain a profitable, relatively stable growth sector has brought about an array of players in private healthcare in Johor, including well-established large healthcare groups, established and increasingly prominent smaller- and medium-sized healthcare providers, and a crop of major investors seeking to expand and diversify their portfolios that increasingly see hospitals as key assets for real estate development (e.g., Malaysian real estate development companies like Tropicana Corp). In this section, we offer an overview of the key players and developments shaping the landscape of medical and long-term care services in Johor and IM now and in the future.

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<sup>6</sup> Two notable exceptions in Johor where doctors have a median of over 35 years of experience are Pelangi Medical Centre (38) and Medical Specialist Johor Bahru (35), both being institutions that have long provided niche treatment.

## *Medical Care*

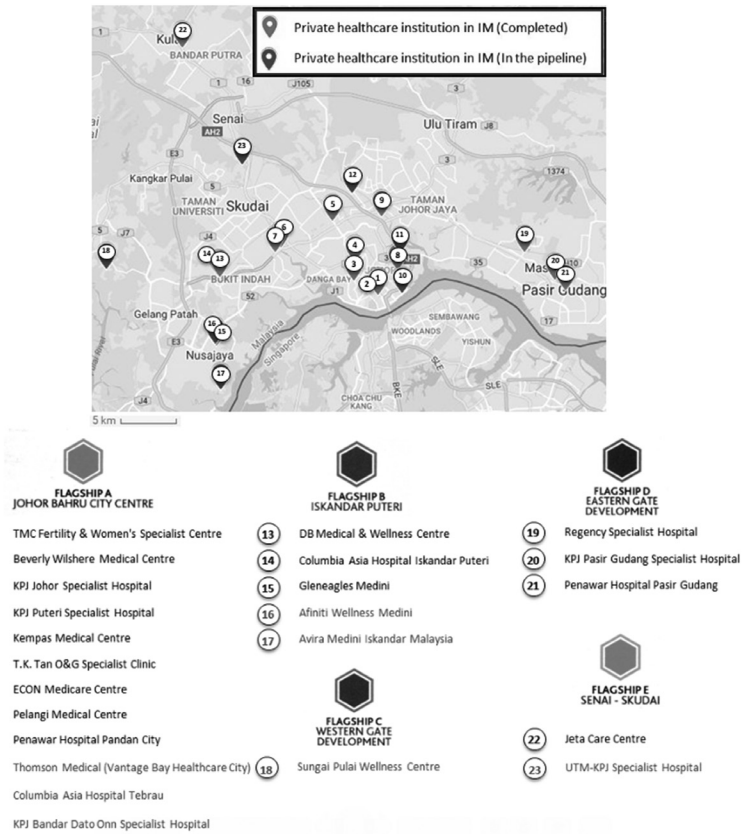
IM is today home to several major hospitals and numerous small and medium-sized specialist clinics and diagnostic centres (Figure 10 and Table 4). As noted in an earlier section, it is estimated that there are 1,500 private hospital beds in IM currently and that this number will grow to 2,500 in the coming years. Of IM's five flagship development zones, Johor Bahru City Centre and Iskandar Puteri are those within which the majority of private healthcare services are most heavily concentrated (see Figure 10) and will continue to grow. Most of the hospitals and clinics in Johor Bahru City Centre were established prior to IM (e.g., KPJ Johor Specialist Hospital (1981), KPJ Puteri Specialist Hospital (1986 [1993]) and TMC Fertility and Women's Specialist Centre (2004)). A more recent wave of hospital construction took place after IM was set up, largely clustered in Iskandar Puteri (e.g., Columbia Asia Hospital (2010) and Gleneagles Medini Hospital (2010)). However, KPJ Pasir Gudang Specialist Hospital (2013) and Regency Specialist Hospital (2009) are both located in IM's Eastern Gate Development Zone.

Several major well-established private-sector healthcare players currently involved in Johor and IM and a number of new players with projects in the pipeline are set to have significant impact on the region. In this subsection, we present this wide array of players, the nature of their current holdings and their plans for development in the region. Across the board, we see optimism and robust growth. All the major well-established players are vigorously working to expand their existing operations in Johor and, more specifically, in IM. New players, mostly foreign investors, are seeking to establish a foothold in Johor's rapidly developing private healthcare services sector, catering to the expected needs of IM's future residents. Even the federal government decided in mid-2017 to set up a branch of the corporatized National Heart Institute (Institut Jantung Negara, IJN) in Iskandar Puteri in order to reach a larger customer base from Malaysia, Singapore and Indonesia (Rao 2017).

Part of the Malaysian state economic development corporation Johor Corporation (JCorp), Kumpulan Perubatan (Johor) Sdn Bhd (KPJ) is the largest healthcare group in Malaysia and the fifth largest in the Asia-Pacific region, managing twenty-six hospitals in Malaysia, two in



**Figure 10: Map Location of Private Healthcare Institutions in Iskandar Malaysia, Johor**



Indonesia, one in Bangladesh, one in Thailand. It also holds a 57 per cent stake in an Australian aged-care facility and stakes in two aged-care facilities in Malaysia. In addition, it has a number of subsidiaries, which include specialist hospitals, medical and consultancy services, management services, healthcare information system services, marketing and distribution of medical and pharmaceutical products, investment holding companies, building management companies, nursing education, and laundry and kitchen services. Nationally, KPJ employs more than one thousand specialists. KPJ hospitals' bed capacity increased from 2,912 in

2015 to 2,929 in 2016, amounting to one-fourth of all private hospital beds in the country. Its average bed occupancy rate (BOR) went from 68 per cent in 2015 to 66.2 per cent in 2016 due in part to “economic uncertainty” (KPJ 2017, p. 34), though this is roughly still on par with the national public hospital average BOR of 68.2 per cent (MIDF 2016). In Johor, five KPJ hospitals currently provide 531 beds, and there are plans to open two more (e.g., the sixty-bed Bandar Dato Onn Specialist Hospital and the UTM KPJ Specialist Hospital) in IM.

IHH Healthcare Bhd (IHH) is the world’s second largest listed hospital group, with fifty hospitals as well as medical centres, clinics and ancillary healthcare businesses across ten countries (Brunei, Bulgaria, China, India, Iraq, Macedonia, Malaysia, Singapore, Turkey and the United Arab Emirates). Its brands include Mount Elizabeth, Pantai, Parkway, Gleneagles, Acibadem and ParkwayHealth. Malaysia is home to fourteen IHH hospitals. IHH was established in 2010 as a result of a merger between Singapore’s Parkway Group and Malaysia’s Pantai Group; numerous global acquisitions followed. Today, Malaysia’s sovereign wealth fund, Khazanah, holds the majority stake (41.17 per cent) (Khoo 2016). In Johor, it owns and operates Gleneagles Medini Hospital and Pantai Hospital Batu Pahat. Seeing Malaysia as a high-growth market, IHH has plans to add 160 medical clinic suites in the next phase of the Johor hospital’s development (IHH 2017, p. 35).

Singapore-based Health Management International (HMI) owns Regency Specialist Hospital (RSH) in Johor and Mahkota Medical Centre in Melaka. While RSH currently has 166 beds, this will grow to 200 beds in 2018, and HMI plans to expand RSH to a 500-bed hospital, given strong patient demand (HMI 2017). Mahkota will also grow from 266 beds to 340 beds in the coming years. Across their hospitals, they note that inpatient growth is higher than outpatient growth due to the weak economic situation, and that foreign patient load growth is more than double (6.7 per cent) that of the local patient load (2.8 per cent) (HMI 2017, p. 6). They wish to continue attracting medical tourists from the neighbouring countries of Indonesia and Singapore in order to maximise their BOR and to offset dips in local patient volumes (HMI 2017, p. 10).

Columbia Asia Hospitals are jointly owned by the U.S.-based International Columbia USA LLC (70 per cent) and the Malaysia-based

Employees Provident Fund (EPF) (30 per cent). EPF also holds an 8.55 per cent stake in IHH and a 20 per cent stake in Iskandar Investment Berhad. With more than thirty hospitals across Asia (India, Indonesia, Malaysia and Vietnam), there are fourteen Columbia Asia hospitals in Malaysia, one of which is in Johor (2010) (Columbia Asia 2018). These are mainly mid-sized hospitals (100–200 beds). Patient demand was especially high at Columbia Asia Hospital-Iskandar Puteri (an estimated 80–90 per cent BOR in 2015), leading the hospital to develop a new wing with an additional eighty-five beds and to build Johor’s second Columbia Asia Hospital in Tebrau (The Edge Property 2015*b*; The Iskandarian 2017). With the new expansion and construction projects, Columbia Asia seeks to become a more prominent healthcare player in IM, serving a different value-segment of the population.

While KPH, IHH, HMI and Columbia Asia are the most significant major private healthcare providers in the region today, we cannot ignore the significance of small- and medium-sized private healthcare providers in the IM and Johor private healthcare landscape. Daiman Development Bhd, a company majority-owned by the Singaporean Tay family, for example, has launched an integrated medical hub at Menara Landmark Medical Suites, positioned as a “one-stop centre for medical services without a single operator” (Loh 2014), that brings together an ambulatory care centre, general clinic and medical services with medical tourism-friendly services (e.g., a DoubleTree Hotel, shopping, and food and beverage outlets) only 2 km from the Johor Causeway. Aesthetics and plastic surgery (Beverly Wilshire Medical Centre), fertility and gynaecology (TMC Fertility Centre), cancer treatment centre, physiotherapy and pain management, MRI and medical imaging, pathology, and dental services are all located at the Medical Suites (Daiman 2015, 2016). Likewise, the Tunku Laksamana Johor Cancer Centre (TLICC) to be built near Horizon Hills in Iskandar Puteri and operational by the end of 2020. The cancer centre, led by Singapore-headquartered healthcare specialist Asian American Medical Group (AAMG), will include a thirty-bed ambulatory cancer facility targeting 7,000 patients annually. Phase Two of its development is pegged to include inpatient services, including a *shariah*-compliant women’s wing, a laboratory for medicine and advanced molecular diagnostics,

and a medical mall with specialist retail outlets (Bernama 2018). These two developments — Menara Landmark Medical Suites and TLICC — demonstrate how specialty treatment healthcare providers can compete with major conventional private hospitals. They offer an innovative model that may enable small- and medium-sized providers to band together in order to better compete with the bigger hospitals not only for local patients but also for Singaporean and Indonesian medical tourists, most of whom travel to Malaysia for diagnostic and specialist outpatient care needs.

A number of significant developers are also seeking to establish medical facilities in IM. Among the most anticipated is the 11-ha Vantage Bay Healthcare City, jointly developed by Singapore's Rowsley Ltd and Singapore-based Thomson Medical's Malaysian subsidiary, TMC Life Sciences Bhd.<sup>7</sup> It is billed as a “cradle-to-grave healthcare hub” or precinct comprising healthcare, education and research arms (e.g., a 500-bed specialist hospital (Thomson Medical Centre) set to open in 2020, a community hospital, health sciences education and training facilities for nurses and allied health professionals, wellness retail services and a hotel catering to medical tourists) as well as lifestyle and wellness arms (e.g., long-term care facilities, a purpose-built urban wellness resort and wellness retail services) (Rowsley Ltd 2017, p. 11; see also Lai 2016). Reflecting the volatile nature of property development in IM, in 2015, Vantage Bay Healthcare City was — like other developments in the region, as we shall see below — repositioned from an integrated residential, office and retail project to a healthcare hub.

Mainland Chinese investors also have stakes in IM's private healthcare services sector. Forest City, a 1,400-ha Chinese-backed mixed-development township built on reclaimed land with an estimated gross development value of RM450 billion, for example, is being developed by Country Garden Pacific View Sdn Bhd (CGPV), a joint venture between Guangdong-based, Hong Kong-listed Country Garden Group and local Malaysian partner Esplanade Danga 88 Sdn Bhd, a company

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<sup>7</sup> Thomson Medical owns hospitals in Indonesia, Malaysia and Singapore.

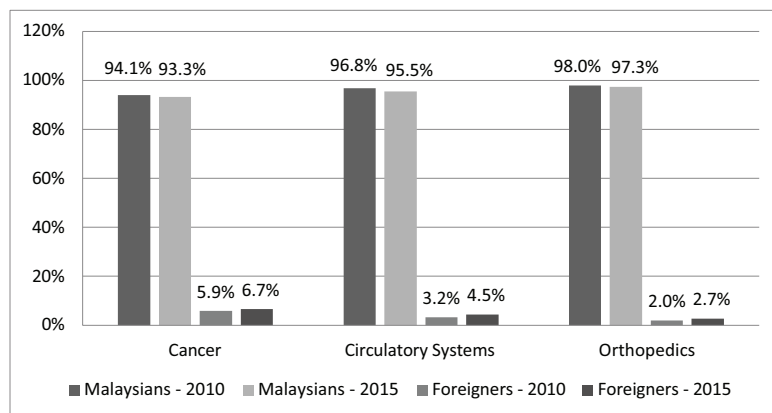
partially owned by Johor's Sultan Ibrahim Ismail. Developers aspire for it to ultimately accommodate 700,000 residents by 2035, many of whom are expected to be mainland Chinese. CGPV's promotional materials cite Gleneagles Medini, KPJ Specialist and Regency Specialist Hospital (RSH) as anchors relevant to prospective buyers. CGPV and the Chinese state-owned Greenland Group are also planning to attract renowned Traditional Chinese Medicine (TCM) facilities to IM (Jaipragas 2017). Forest City will be home to the first international branch of the Foshan Hospital of Traditional Chinese Medicine (Lee 2017). Typical of IM's eclectic mix of entertainment and healthcare infrastructure, the Tebrau Bay Waterfront City project in IM's Eastern Corridor, a joint venture between Greenland Group and the Johor state government-linked company Iskandar Waterfront City Berhad (IWCB), over the next fifteen years will come to include a "snow world" theme park, an opera house and a TCM hospital (Whang 2015*b*).

### *Medical Tourism*

Private Malaysian hospitals received some 921,500 foreign patients in 2016. Half of these were already residing in Malaysia (i.e., expatriate workers, retirement migrants and international students), while the other half (what the Ministry of Health Malaysia calls "health tourists") travelled expressly to Malaysia for treatment (*New Straits Times* 2017). The medical tourism destination heavyweights in Malaysia are Pulau Pinang (with 40 per cent of all foreign patients and 60 per cent of "health tourists"), the Klang Valley (comprising Selangor and the Federal Territory of Kuala Lumpur, and accounting for 34 per cent of all foreign patients but only 12 per cent of all "health tourists") and Melaka (11 per cent of all foreign patients and 19 per cent of all "health tourists").

The state of Johor is a minor player by comparison, accounting for only 4 per cent of all foreign patients and 4 per cent of all "health tourists" treated in Malaysia in 2016 (Marini 2017). Focusing on three popular disease treatment categories for medical tourism, Johor only recorded a 2.7–6.7 per cent foreign patient volume in 2015 (Figure 11), which is minor when compared with Pulau Pinang (15.2–35.8 per cent) and Melaka (8.8–21.6 per cent). Compared with other key states in Malaysia,

**Figure 11: Percentage Share of Malaysian and Foreign Inpatients by Selected Disease Treatment Categories in Johor, 2015**



Source: Ministry of Health Malaysia (Ministry of Health Malaysia 2018) and authors' calculations.

foreign patients to Johor contributed approximately 5.7 per cent (RM43 million) of Johor's total private hospital revenue in 2015, this was only half the national average (10.2 per cent) and a mere one-sixth of Pulau Pinang's (31.6 per cent). While foreign patient numbers in Johor private hospitals are increasing on the whole, the rate of increase does not outpace the national average.

For more than a decade, Johor has been pegged as the country's up-and-coming medical tourism destination in light of its proximity to Indonesia and Singapore. This is evidenced by the IRDA identifying healthcare as an important driver and component for the IM region's growth, seeking to position IM as "the next medical destination for patients who are seeking for quality and cost-effective healthcare across the region" (IRDA 2016b). Yet Johor's role in medical tourism has been relatively minor to date. Not yet in competition with other better-established Malaysian medical tourism destinations like Pulau Pinang and Melaka for foreign patients from further afield, Johor private hospitals currently largely cater to the healthcare needs of those who already have or are developing

ties to Johor (e.g., Indonesians from nearby islands, patients or patients' family members already living in Johor, Singaporean seniors and international expatriates planning to settle in Johor, patients of Malaysian origin who live in Singapore, etc.). Roughly half of all medical tourism in Johor comprises foreigners residing in Malaysia, while the other half comprises "health tourists". Indonesians made up 90.5 per cent of all "health tourists" in Johor in 2015, while Singaporeans, the second largest group of "health tourists" in Johor, comprised only 4.3 per cent. These figures suggest that poor access to reliable, high-quality medical care in nearby Indonesia remains the most crucial push factor for Indonesians to pursue healthcare in nearby Johor, a trend that will likely persist long into the foreseeable future and on which many private hospitals promoting medical tourism in the region continue to strongly rely.

The persistently small number of Singaporean "health tourists" has troubled the region. There were initially hopes that this number would grow in the wake of Singaporean legislation that, starting on 1 March 2010, enabled Singapore residents to use their Medisave funds<sup>8</sup> on hospitalization and day surgeries in selected Malaysian hospitals with an approved working arrangement with a Medisave-accredited institution or referral centre in Singapore (Ministry of Health Singapore 2010). To date, this cross-border care scheme has relied solely on two Singapore-linked hospital groups — Health Management International (HMI) and Parkway Holdings Pte Ltd — that have facilities in both Singapore and Malaysia. HMI hospitals in Malaysia include Mahkota Medical Centre (Melaka) and Regency Specialist Hospital (IM). Parkway Holdings (later IHH) hospitals are spread around Malaysia and include those under the Pantai and Gleneagles brands, and Johor is home to Gleneagles Medini Hospital. As of 2018, only three hospitals in Johor have qualified for Singaporean Medisave use: Pantai Hospital Batu Pahat, Regency Specialist Hospital (IM) and Gleneagles Medini Hospital (IM). These hospitals promote themselves as offering strong value for money for Singaporeans and

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<sup>8</sup> Compulsory personal health savings scheme derived from 8 per cent of an employee's monthly income and that can only be drawn on for health-related payments.

other international patients, given that procedures cost 30–50 per cent less in Malaysia than in Singapore and that they are geographically, linguistically and culturally close to Singapore (Whang 2015a). In the six months following the policy implementation, newspapers reported that a significant proportion of Singapore residents pursuing care in Malaysia were doing so for obstetrics and giving birth. Others sought coronary angiograms, cataract surgery, total knee replacement and total hip replacement (Lim 2010). However, the proportion of Singaporean “health tourists” in Johor appears to have remained relatively small since 2010. Further research is necessary to identify the potential effects of the Medisave cross-border care scheme on both care providers and patients in Singapore and Malaysia, especially in the states most likely to be most heavily affected: Johor and Melaka.

Despite Johor’s comparatively minor role on the national stage in medical tourism, a number of hospitals located in the state — especially those in the IM zones of Johor Bahru City Centre and Iskandar Puteri — actively promote themselves as medical tourism destinations. This enables them to benefit from government policies supporting medical tourism which qualify them for a range of fiscal incentives mentioned earlier in this report. However, Johor does not have a state-based association equivalent to Pulau Pinang’s Penang Centre of Medical Tourism (PMED), which coordinates hospital marketing efforts and promotes Penang as a unified medical tourism destination. While many of IM’s major hospitals promoting medical tourism are MHTC members, it may be a wise move to emulate the PMED model in order to promote IM as Malaysia’s southern medical tourism hub.

### *Wellness, Lifestyle and Ageing*

Numerous players in Johor are deploying “health”, “wellness” and “lifestyle” narratives to pitch their services and property developments. The IRDA, for instance, frames IM as a global “mart city” that avails residents and visitors of state-of-the-art medical and health facilities and services as well as “healthy” housing and a “health-supportive” physical (i.e., “green” and “clean”) and social environment (e.g., via public–private nutrition and exercise initiatives to encourage healthy lifestyles



and workplaces) (IRDA 2016c). In the realm of private healthcare, we also see preventive health services and screenings being packaged as “wellness” offerings (e.g., KPJ Johor Specialist Hospital’s Wellness Clinic).

This trend is most prominent among Khazanah-owned healthcare and property developers, who have deployed a “wellness” theme to make a number of major mixed-use developments in Iskandar Puteri more attractive. These developments are generally anchored by major hospitals. The Afiniti Medini Wellness Project, anchored by Gleneagles Medini Hospital and developed by Pulau Indah Ventures (PIV), a 50:50 joint venture between Khazanah and Temasek, is expected to include residential units, serviced apartments, a corporate training centre, a wellness centre and wellness-themed retail. During our October 2017 visit, we found that the Afiniti Medini Wellness project was most likely in its final phase, with at least four companies having set up shop there. In a similar vein, Khazanah-subsidary UEM Sunrise’s 67-acre Afiat Healthpark, anchored by Columbia Asia Hospital, is framed as a future “integrated medical hub”, offering traditional Chinese medicine (TCM) and modern medicine as well as wellness opportunities, set within “lush manicured environs” with golf courses, a hotel and a care centre. When UEM put the empty DB Wellness & Medical Suites “care centre” property on the market, it was promoted as ideal for diverse specialist medical services, diagnostic medical services, psychotherapy, ozone therapy (banned in 2017), physiotherapy, traditional and complementary medicine, beauty and wellness services, and pharmacy. A number of smaller developers are building near it. However, during our October 2017 visit, we noted that, despite the DB Kompleks having been long completed, there appeared to be limited interest in occupying the medical and commercial units.

Intriguingly, “wellness” and “lifestyle” are also strategically deployed to make retirement village-style developments more appealing in IM (see, e.g., Lee, in *The Edge Property 2015a*). Take, for instance, Avira Medini Iskandar (previously called the “Urban Wellness Project” and “Medini Integrated Wellness Capital” (Medini IWC, 2013)). It is a 207-acre mixed-development resort-like “wellness township” developed by Nuri Merdu Sdn Bhd, a joint venture between Galaxy Prestige Sdn

Bhd (a subsidiary of E&O Bhd) and Pulau Indah Ventures Sdn Bhd (a joint venture between wholly owned subsidiaries of Khazanah and Temasek). This gated community with different residential offerings, a retail “village” and a 12.5-acre “Wellness Sanctuary” is, according to the 2016 E&O Annual Report, focused on “prolonging active years by promoting physical vitality and mental clarity through holistic, non-invasive programmes backed by scientifically-proven methods, technologies and diagnostics” (E&O Bhd 2017, p. 38).

The number of facilities for more frail, dependent seniors is also growing in Johor. One of the “model” aged-care projects identified by the ETP (Pemandu 2013a) is led by Singapore-based Econ Healthcare Group, which has facilities in Singapore, Kuala Lumpur and a 199-bed facility in the Taman Perling area of IM’s Iskandar Puteri zone. Another is JetaCare, a 66-bed purpose-renovated “mid-range” care facility in Kulai that brings together elements of an Australian aged-care home model with the Confucian value of filial piety (*xiào dào*). JetaCare has one facility in Australia (a joint venture with KPJ), two in China and four in Malaysia.<sup>9</sup> Facilities like these in Johor, which seek to attract not only locals from Johor but also Singaporeans, struggle to combat societal taboos surrounding the outsourcing of elder care in both countries (Ormond 2014). Notes one anonymous sector representative interviewed, “if one wants to be successful in [this sector in] Asia, one has to adapt [an aged-care facility] and integrate it with the local culture demanding the services”. This means detaching deeply seated notions of what it means to be a “good” son or daughter from beliefs that children themselves must physically care for their ageing parents as well as being affordable for seniors’ families.

There are concerns in the sector about what the 2017 Private Aged Healthcare Facilities and Services Bill (PAHFSB) will require of existing and forthcoming aged-care facilities, especially since compliance with building and care-giving standards may require many facilities to raise

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<sup>9</sup> In addition to the one in Johor, there is an eighty-eight-bed facility in the Klang Valley and two more are in the pipeline in Johor.

residents' costs. Local facilities currently cost between RM1,000–3,000 per month. Differences in price are linked to the quality of residential conditions and the quantity and quality of care labour (i.e., staff-to-resident ratios are lower in more expensive facilities). Profit margins for such facilities are minimal. Notes another anonymous sector representative interviewed, "Senior care is not like general medical care. [With m]edical care, for example one operation can cost a lot of money. But, with senior care, we don't do operations." However, if paired with other kinds of services and retail in a retirement village model, developers believe that such facilities could function as anchors and yield greater profitability. It is reportedly difficult to attract well-trained care-givers due to societal beliefs that aged-care facilities are equated with low-wage, depressing work. However, there are initiatives to train local people in order to acquire the required level of care-giving skill and the sector is pushing for greater governmental support in the form of fiscal incentives for training and retaining care-givers.

Aged-care facilities in Johor mainly attract Malaysians though they also are home to some Singaporeans and Westerners. As with medical care, IM is seen as an especially strategic location for attracting older Singaporeans because of its geographical proximity (Ormond 2014). In one facility we studied, 20 per cent of the residents were Singaporean.

### *Medical Education*

Iskandar Puteri's EduCity was developed as an education hub and is an ETP Entry Point Project (EPP). It comprises universities, research and development (R&D) centres and student accommodation. It is meant to feed talent into IM's industries. Invited by the Malaysian Federal Government to set up in IM, Newcastle University Medicine Malaysia (NUMed Malaysia) was an early anchor tenant for this development (2011). It, like other universities in the area, benefits from a favourable land price, leasing the land for thirty years from Iskandar Investment Bhd before receiving rights to purchase the land for £1. NUMed Malaysia offers an MBBS programme (Bachelor of Medicine, Bachelor of Surgery), and a biomedical sciences degree. It is not currently operating at its full capacity of 1,000 students, and only 7–10 per cent of its current

600 students are international students. The limited number of foreign students has been attributed in an interview with us by NUMed's Provost and CEO Prof Roger Barton to these students not being permitted to work in Malaysia after 2011 upon graduating and students' home countries (e.g., Singapore) not always recognizing degrees earned on the NUMed Malaysia campus.

NUMed intends to build more labs to develop its research potential and a primary care centre to expand its campus and provide staff the chance to continue clinical practice to ensure high-quality, up-to-date education. As at August 2017, NUMed Malaysia had four to five ongoing research collaborations with partners like the Institute of Medical Research (IMR), Universiti Teknologi Malaysia (UTM), National University of Singapore (NUS) and University of Malaysia (UM). Barton expects more research grants to come in for international collaborative work. In the near future, NUMed Malaysia expects to enrol more students for the biomedical science degree programme, contributing to medical research work. NUMed already works together with public hospitals in the area for compulsory clinical attachments, but it would like to partner up with private healthcare providers. Private hospitals are, however, thought to be reluctant because they believe that patients do not want to be treated by students.

## **FUTURE PROSPECTS AND CHALLENGES**

In seeking to capitalize on global and national private healthcare growth trends, the Federal and Johor State Governments and the private sector have jointly collaborated in a number of ways to enhance the development of Iskandar Malaysia's (IM) private healthcare services sector so that it may become a dynamic, integrated and world-class healthcare destination for local residents and foreign visitors alike. To reach these objectives, as we have seen throughout this report, IM's development intersects and frequently aligns with national strategies and policies in the medical care, aged care, and lifestyle and well-being sectors. It becomes clear, however, that a number of issues must be addressed by policymakers and commercial and civic actors in order to ensure continued positive development in this sector.

First, IM's economic volatility and the eclectic idealism of its developments must be reduced. With the planned construction and expansion of many new hospitals and developments targeting a growing, more diverse and rapidly ageing population, stakeholders in the private healthcare industry are showing very strong signs of optimism. However, IM's troubling economic volatility, brought on by political scandals (e.g., IMDB) and fears about real estate investment stoked by limited corporate settlement, Singapore's unwillingness to relax border control to facilitate easier cross-border movement, and China's 2016–17 capital outflow controls have led to a glut of property development and a massive drop in sales (Tan and Yong 2017; Vasagar 2017). The future of private healthcare in Johor and in IM in particular is intimately tied to these much larger property developments and trends, both because private healthcare developers are increasingly the same as property developers (e.g., Khazanah, Thomson Medical, etc.) and because IM's future population growth relies heavily on corporate settlement in IM and the jobs that such settlement generates.

Second, because Johor and IM are not (yet) significant medical tourism destinations, private healthcare providers in the region depend by and large on local residents as their consumer base. Economic forecasts suggest that private providers are at least somewhat buffered from temporary economic downturns in the sense that they do not easily lose their target middle- and upper-class customer bases. Hence, and given the current rate of expansion of existing hospitals and construction of new ones in Johor and specifically in IM, it will be essential to secure local demand. To do this, the government will need to develop measures that increase the Johor household income base and bring more families into the middle-income bracket as well as to foster interstate migration from within Malaysia that will attract higher-income talent in larger numbers to work, live and play in IM. Improving the liveability of Johor and IM (e.g., reduction of crime rates, transportation infrastructure, etc.) is paramount to the region's success. Safe access to high-quality healthcare and active lifestyle amenities is one step towards making the region more attractive to new residents. While housing is cheap and plentiful, poor transport infrastructure makes the region undesirable, hindering specialist workforce recruitment. Developers need to work

together more with existing government bodies to create better plans and infrastructure. Public amenities such as schools, green spaces and parks, public activity/assembly halls, market places, local bus and rail services linking different areas of IM and high-speed Internet connection cables would be the cornerstone for creating a feasible and liveable environment for more residents and health workers to stay in IM. Such infrastructure would sustain private healthcare sector growth in the region.

Third, significant deviation from current private healthcare policy, development and promotional practices is unlikely in the foreseeable future and medical tourism is expected to remain a key government interest. To strengthen medical tourism, which could play a major strategic role in filling up Johor private providers' unutilized capacity, private players — both large and small — require greater coordination and cooperation at the state level and perhaps specifically at the SEZ level in promoting medical tourism and in setting up centres of excellence and medical tourist-friendly services that cater to the actual needs of international patients, most of whom are middle-class Indonesians. Relaxing regulations in IM on hiring foreign medical professionals would be useful to draw greater medical expertise to the region and, while it is widely believed in the industry that national and international accreditation (e.g., Malaysia Society for Quality in Healthcare (MSQH) and U.S.-based Joint Commission International (JCI)) are useful tools for attracting foreign patients to hospitals and clinics, the actual significance of such schemes in international patient decision-making remains largely unknown.<sup>10</sup> Further study is necessary to identify the specific draws of Johor as a medical tourism destination relative to other better established destinations within Malaysia (e.g., Melaka, Klang Valley and Pulau Pinang) and Southeast Asia (e.g., Singapore and Thailand) and the extent to which accreditation schemes are useful in increasing destination prestige and use among specific international patient markets.

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<sup>10</sup> Seven Johor private hospitals in Johor were MSQH-accredited as at 3 January 2018 and, while Malaysia has twelve JCI-accredited facilities, only one Johor hospital — KPJ Johor Specialist Hospital — holds JCI accreditation.

Fourth, despite the IM's SEZ status relaxing restrictions on foreign equity (e.g., foreigners can own 100 per cent of equity in private hospitals, specialist medical clinics and specialist dental clinics), the majority of private hospitals in Malaysia and IM is locally owned and/or a result of joint ventures with foreign investors. This suggests there may be barriers to full foreign investment in IM's private healthcare services sector. Since the healthcare industry is highly regulated, there remain challenges for new investors to understand and navigate the approval processes to set up new private healthcare facilities as well as to bring in foreign doctors and practitioners. In light of these challenges, IRDA has developed a one-stop centre to fast-track the process of obtaining approval and licenses for catalytic healthcare-related projects in IM. However, while the privileges and tax exemptions granted to foreign investors have been extended (Musa 2014a), it appears that these continue to be mostly made use of within the scope of foreign–local partnerships. Tracking the impact of these federal fiscal incentives and monitoring actual demand for private-sector capacity are essential to assess the value and utility of such incentives (e.g., return on investment (ROI) for the government), especially given the potential for such incentives policies to promote the generation of excessive private-sector hospital and clinical capacity if left unchecked.

Finally, greater attention should be paid to opportunities to forge greater linkages between IM's healthcare services sector and other health sectors like medical education and biosciences training, medical devices and pharmaceutical product manufacturing as well as other non-health sectors like logistics and information technology in order to create multiplier effects. Given IM's proximity to Singapore and potential for functioning as a strategic overflow site for Singaporean research and development, connections with Singapore's Biopolis should not be overlooked.

Because it is sandwiched between Singapore and Melaka, simply being home to a handful of excellent hospitals cannot propel Johor towards becoming a renowned regional medical care hub. We argue that the confidence of investors, employers, patients and residents in Johor's private healthcare services sector must be boosted by a comprehensive, integrated and well-structured development plan that considers

subnational, national and regional demographic, social, economic and political factors.

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