MEDICAL TOURISM IN MALAYSIA :

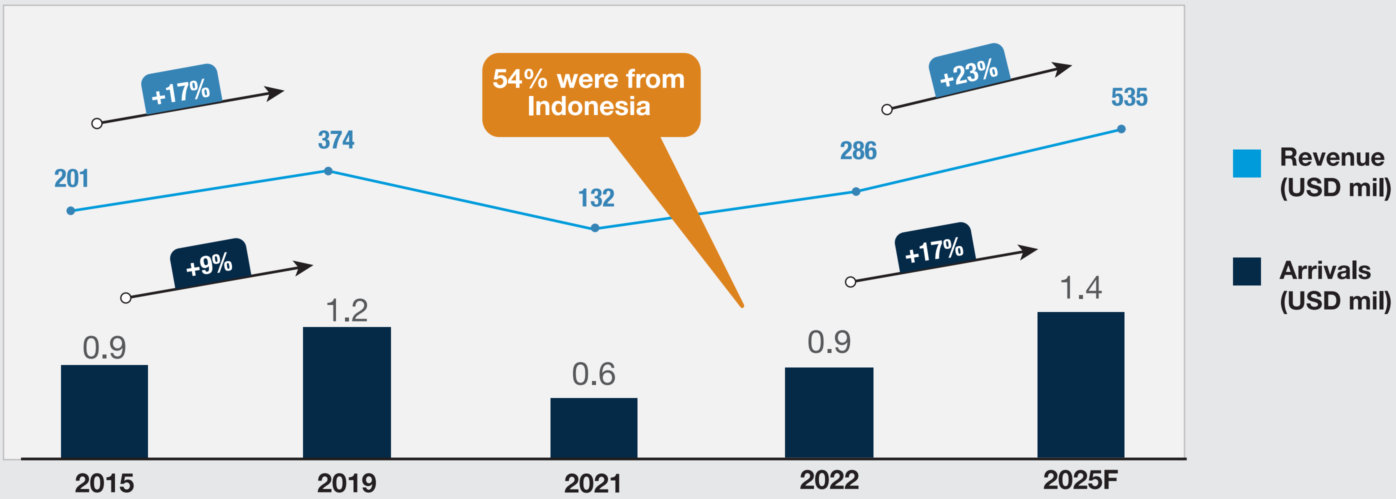
TAIL WINDS DRIVING GROWTH

Introduction

Malaysia has long been a well-known destination for medical tourism in the region.

Before the COVID-19 pandemic, revenues from medical tourism grew by ~2x from $201 million in 2015 to $374 million in 2019. Post-pandemic, medical tourism has rebounded with $286 million in medical tourist revenues in 2022, surpassing the Malaysia Healthcare Travel Council's (MHTC) target of $170 million. In 2023, this momentum continued with $190 million revenues recorded in 1H 2023 and is on track to equal or exceed its 2019 record.

Medical Tourism Volume and Revenue in Malaysia, 2015–2025F



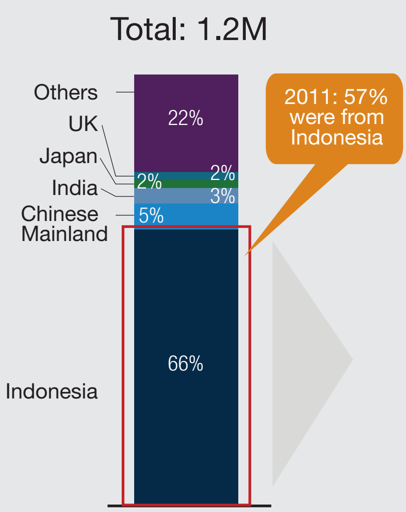
Note: Figures based on MYR to USD conversion rate of 0.22
Source: MHTC statistics

Indonesia is a key source market for Malaysia

With its close geographical proximity, language and cultural similarities, Indonesian patients have been the primary contributor to medical tourism. The top destinations for Indonesian medical tourists are:

- **Penang –** Island Hospital, Gleneagles, Loh Guan Lye, Penang Adventist and Pantai Hospital Penang are popular destinations for various treatments
- **Kuala Lumpur –** Popular destination for cardiology (IJN) and other treatments (Gleneagles, Pantai, Prince Court, KPJ)
- **Others –** Mahkota Medical Center (Malacca), KPJ Johor and Regency Specialist Hospital (Johor)

Medical Tourism Volume and Revenue in Malaysia, 2019(Percent)



Top Malaysian destinations for Indonesian medical tourists

~50% Penang (generally preferred over KL due to tourist attractions)

Source Cities	Share%
Medan	45-50%
Acheh	25-30%
Rest of Indonesia	~20-30%

~40% Kuala Lumpur

Source Cities	Share
Jakarta/ Bandung	75%
Surabaya	5-10%
Rest of Indonesia	15-20%

~10% Others

X% share of Indonesia med. tourists

Source: MHTC statistics, expert interviews, news articles, A&M analysis

Competitive Forces - Indonesia

The Indonesian government is looking to stem the outflow of medical tourists

Annually, around 2 million Indonesians travel overseas for medical checkups and treatment, spending an estimated $9 billion. Recently, the Indonesian government has embarked on improving medical infrastructure to ensure better quality care and reduce outbound medical tourism. Key initiatives include partnering with renowned institutions like the Mayo Clinic to develop new medical facilities, expand the range of treatments offered, increase the number of hospitals, and even relax regulations on foreign specialists working in the country.

However, the push by the Indonesian government to improve domestic healthcare infrastructure is unlikely to deter Indonesians from seeking health treatment overseas in the medium term.

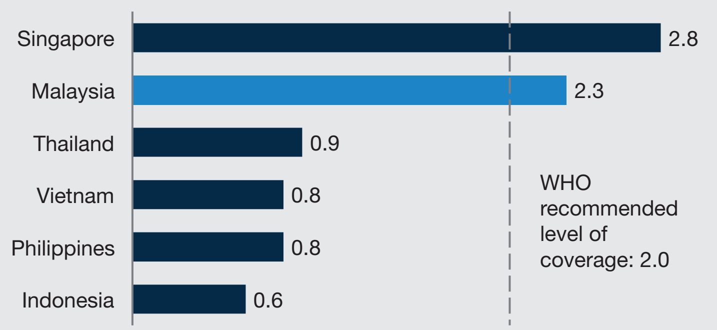
Despite the Indonesian government's efforts to improve healthcare infrastructure, it still has some way to go before it can come up to par with regional and, further, global standards. The overall bed per capita ratio in Indonesia currently stands at 1.2 beds per 1,000 persons, and even with the additions in hospitals and hospital beds, it is expected to reach 1.7 in 2027, well below WHO's recommended ratio of 2.4. Additionally, Indonesia has one of the lowest ratios of physicians per capita. At 0.6 physicians per 1,000 persons, it is ~4x less than Malaysia and ~3x below WHO's recommended ratio.

Indonesia is also severely lacking in specialty resources and infrastructure to serve its population of about 270 million, especially in areas out of Java. Cardiovascular disease is the leading cause of deaths in Indonesia, but it only has about 1,485 cardiologists (1 cardiologist for every 250,000 persons vs. the recommended ratio of 1 to 100,000) and 310 catheterization labs, 67 percent of which are in Java. Also, Indonesia only has about 140 medical oncologists and 200 surgical oncologists, with most of them located in Java.

Benchmark	Hospital Beds per 1,000 Population
WHO	2.4
Thailand (2020)	2.1
Malaysia	2.0
Indonesia (2020)	1.2 (JKT: 2.2; Sumatera: 1.3; Rest of Java/Bali: 1.1)
Indonesia (2027)	1.7

Source: WorldBank data, MOH Singapore, WHO

No. of Physicians per Capita in SEA-6 Countries
2020[1], # physicians per 1,000 population



Note: 1) Singapore based on 2022, Vietnam based on 2016 data

Preference for overseas treatment amongst Indonesians

Affluent, high-income Indonesians generally seek treatment overseas due to a lack of trust in the local system and infrastructure. There is a strong perception amongst Indonesians that its healthcare system suffers from a lack of doctor supply and poor quality of doctors, infrastructure and facilities, and it will take time for this perception to change.

[1]Based on 2022 data for Singapore, and 2016 data for Vietnam

Regional Competition

Singapore and Thailand are well-established hubs for medical tourism in the region. India, also an established hub, has seen a government-led emphasis on medical tourism growth with a target of $13 billion in receipts by 2026 (2019: $3-4 billion).

- **Singapore:** Known for state-of-the-art medical facilities, cutting-edge technology and high standards of medical care with many hospitals being Joint Commission International-or JCI-accredited.
- **Thailand:** Known for wellness, aesthetic, dentistry and fertility treatments. The government recently launched a $131 million Phuket Medical Hub to attract international tourists for wellness and medical treatment.
- **India:** Differentiates its offerings through a combination of modern medicine and traditional therapies like ayurveda, yoga and panchakarma.

Country	Medical Tourists[1]			JCI-Certified hospitals (per popn. million)	# Licensed beds (per popn. thousand)
	# (M')	% of total tourist	Receipts ($)		
Thailand	~3+ (0.6 Excl. Wellness)	1.6%	$1.5-$2.4B[2]	0.9	2.1
India	0.5	3.1%	~$1B	2.2	2.4
Singapore	0.7	6.4%	~$3-4B	0.03	

Source: Statista, news reports

Advantage Malaysia

Strong marketing, word-of-mouth, cultural affinity and value-for-money makes Malaysia a preferred destination for Indonesian medical tourists.

Marketing and customer relations

Over the years, Malaysia has built a strong reputation among Indonesian medical tourists, partly due to government support and promotional activity. The MHTC and its partner hospitals make a concerted effort to promote Malaysia to Indonesians, with 3–4 roadshows per year in Jakarta, Surabaya and Medan with promotional materials and marketing representatives communicating in Bahasa Indonesia. This, coupled with word-of-mouth from satisfied customers, has helped to bolster Malaysia's standing and brand presence.

[2]All data at annual pre-COVID rates
[3]Includes receipts for cosmetic and aesthetic treatments.

RELATIVE PERFORMANCE VS INDONESIA

Indicative Metric	MALAYSIA	THAILAND	SINGAPORE	INDONESIA
Promotions/ Awareness				NA
Hospital advertising, promotion and customer relations	Govt support (i.e. MHTC, State govt initiatives), concierge, tax allowances	Visa support, private sector	Little- to- no govt support, largely private	
Healthcare Quality				
JCI-accredited hospitals (per million population)	0.5	0.9	2.2	0.1
Licensed hospital beds (per 10,000 population)	19	21	24	10
Proximity and Ease of Travel				
Connectivity-Aircraft Movement growth (thousand flights)	2021:233 2022F: 444(+91%)	2021:245 2022F: 348(+42%)	2021:109 2022E: 138(+27%)	2021:NA 2022: NA
Travel options/time	Flight, ferry (~50-120 mins)	Flight (~180 mins)	Flight, ferry (~45-110 mins)	
Price				
MRI Scan(SGD)	$350-400	$345-1,530	>$1,200	$500-570
Heart bypass(USD)	$12,000-13,00 0	$14,500-15,600	$17,000-18,000	NA
Knee replacements (USD)	$7,000-8,000	$13,500-1 5,000	$15,500-16,500	NA
Angioplasty(USD)	$7,500-8,000	$4,000-4,5 00	$13,000-13,500	NA
Cultural Affinity				
Language	Bahasa, English widely spoken	Thai, English	English, Chinese, Bahasa	National language: Bahasa Indonesia; English 2nd
Religion, cuisine	Muslim majority, hospitals w. Halal compliance	Muslim majority, hospitals w. Halal compliance	Non-Muslim majority	Muslim majority, hospitals w. Halal compliance

Top factors | Secondary factors

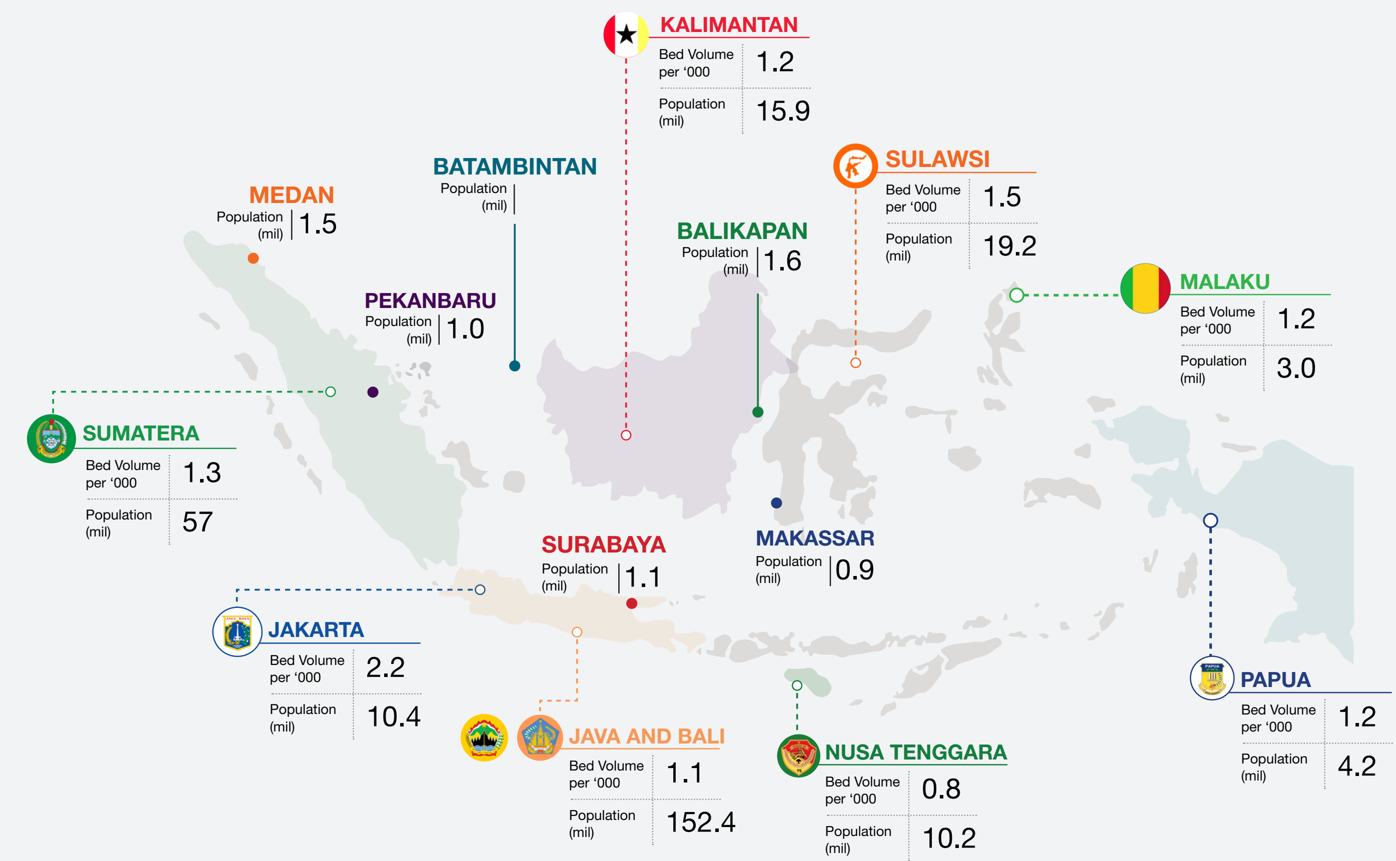
Ease of travel

Being a large country geographically spread out over many islands, some Indonesians, especially those in Sumatra, find it faster and more convenient to travel to Malaysia for medical treatment than to Jakarta. For instance, a flight from Medan — a major city in Sumatra — to Penang takes 55 minutes as compared to 2.5 hours from Medan to Jakarta. There are also multiple travel options (flight, ferry) as well as frequent weekly flights between major cities in Indonesia and key medical tourist destinations in Malaysia (Kuala Lumpur, Penang).

Key Travel Routes for Medical Tourism From Indonesia	Weekly Flights
Medan - Penang	44x
Acheh - Penang	9x
Jakarta/Bandung - Kuala Lumpur	112x
Surabaya - Kuala Lumpur	32x
Pekanbaru/Dumai - Malacca	7x (ferry)
Batam/Bintan - Johor	77x (ferry)

Source: Web search, flight/ferry websites

Beds Capacity per 1,000 people across Indonesian regions and key cities (2019)



Source: WHO, MOH Indonesia, A&M analysis

Government support and ecosystem

Other than marketing and promotional support, the MHTC also provides ecosystem development support for the medical tourism industry. Hospital partners can obtain investment tax incentives, and patients can avail themselves of healthcare concierge and lounge services as well as fast-tracked immigration baggage claims. In contrast, medical tourism in other countries such as Singapore and Thailand is largely driven by the private sector with minimal government support.

Value for money

Malaysia offers one of the best healthcare quality-to-price ratios in the region. Compared to Singapore, treatment prices in Malaysia are about 50 percent less and may be even cheaper for selected private hospital treatments in Indonesia. For instance, the price of a knee replacement procedure in Malaysia is $7,000–8,000 compared to $15,500–16,500 in Singapore. An MRI scan would cost $350–400 in Malaysia, as compared to $500–570 in Indonesia and over $1,200 in Singapore.

> "Patients know that they can get quality treatment at a fraction of SG's price"
>
> -MY Doctor

> "I had a patient who paid 2x more than MY for cancer treatment in private hospital in Jakarta"
>
> ID Medical tourism agent

Cultural affinity

Malaysia and Indonesia are culturally very similar, having a similar language (Bahasa), religion (Muslim-majority) and, with it, food preferences (halal-compliant). This enhances the appeal of Malaysia to Indonesians, who find the environment familiar during their stay in Malaysia when seeking treatment.

Medical tourists go to Singapore and Thailand for different treatments

Malaysia is generally regarded as a destination for the Big 3 specialties – oncology, cardiology and neurology/pain management. Thailand is generally associated with dentistry, fertility and aesthetic treatments while Singapore is sought after for high-complex oncology, cardiology and neurology procedures that require more sophisticated equipment and advanced specializations.

Potential beyond Indonesia

Bumrungrad International Hospital in Thailand, which is widely regarded as the leading hospital for medical tourism in the region, is successful because of several factors, such as value-for-money premium healthcare facilities, medical tourist support services and abundant sightseeing options. Malaysian hospitals also provide these features, providing the country the potential to become a top medical tourist destination globally. More importantly, MHTC is proactive in amplifying brand equity and forging strategic partnerships with other countries to bring in medical tourists. This puts Malaysia in a good position to compete with top medical tourism hospitals in the region such as Bumrungrad, Mount Elizabeth (Singapore) and Gleneagles (Singapore).

Key Success Factors for Bumrungrad International Hospital	Examples
Premium facilities and, quality healthcare at affordable prices	5-star hotel ambience with VIP suites
Additional patient support for medical tourists	Dedicated Medical Coordination Office to provide personalized travel assistance and individual cultural support for international patients
Brand reputation	First hospital in Asia to be JCI- accredited
Presence and partnerships with source markets	> 50 referral offices in > 20 countries
Tourism/other activities nearby	Offers spa and yoga facilities for medical tourists or their companions

Opportunities for Malaysian Players

New Source Markets

After Indonesia, the Chinese mainland and India are the source countries for medical tourism in Malaysia. To promote Malaysia as an international medical tourist destination, the MHTC has established strategic ties with markets such as Bangladesh, the Chinese mainland, Cambodia, Myanmar and the Middle East. These markets are seen as having high potential due to the lack of healthcare facilities, cultural similarities and the availability of frequent direct flights. In particular, the MHTC has been marketing Malaysia as a fertility hub to attract medical tourists from the Chinese mainland seeking to circumvent the Chinese mainland guidelines on gender selection and IVF procedures. In line with this, major private sector players are aiming to establish secondary markets in Indochina, South Asia and the Middle East and North Africa as well as fortifying their presence in Indonesia. The top markets with high potential are as follows:

	Push Factors	Pull Factors
Chinese Mainland 0.03 JCI hospitals per M pop. (MY: 0.5)	■ **Increasing pressure on the healthcare system due to an aging population** inadequate number of quality hospitals per population with wait times averaging up to two hours ■ **Stringent IVF regulations –** i) disallows gender selection and ii) prohibits advanced procedures (egg freezing for single women)	■ Quality healthcare at lower costs compared to Singapore or the Chinese mainland ■ **Cultural affinity** – Mandarin is widely spoken ■ Apart from Thailand, Malaysia is also a popular **fertility hub in Asia, with** 10 of the 30 fertility centers globally certified by the International Reproductive Technology Accreditation Committee present here
Middle East 0.7– 3.1 JCI hospitals per M pop. (MY: 0.5)	■ A small population size (Kuwait, Oman) pose a barrier for development of specialized tertiary services ■ Residents have universal healthcare with the governments financing foreign treatments if unavailable locally	■ Strong promotional push from MHTC in the region (Dubai EXPO, IMTEC in Oman) ■ Cultural affinity – Halal/Syariah-compliant services (halal meals, disuse of porcine-based drugs) ■ Cost advantage over traditional choices for Arabs (the U.K. and the U.S.)
Bangladesh 0.01 JCI hospitals per M pop (MY: 0.5)	■ Poor healthcare system with lack of trust in local doctors and beds capacity (0.35 per '000 vs 1.9 in MY)	■ **Cultural affinity** – Halal/ Syariah compliant services ■ **Strong G2G and referral partnerships –** i) Favorable visas for MTs and emergency cases, ii) a partnership agreement with MHTC and NCH for patient referrals

Capability-building to attract high-value CONGO treatments

A majority of medical tourists come to Malaysia for health screening. The share of medical tourists who seek high-value treatments in streams such as cardiology, oncology, neurology, gastroenterology and orthopedics (CONGO) make up less than 30 percent of tourists. With Malaysia being known as a cost-competitive healthcare destination, players that invest in deepening key specialties and equipment sophistication are well-placed to capture some of the demand for high-complexity treatments from countries such as Singapore.

Over the next few years, top healthcare groups in the country are planning to advance their offerings in high-value treatments, pediatrics and robotic services to tap foreign demand. For instance, Sunway Medical Group intends to strengthen its quaternary services in kidney transplant, pediatric heart surgery and bone marrow transplant, while KPJ Healthcare is targeting more surgical referrals from neighboring countries.

Top treatments sought by medical tourists in Malaysia by volume 2019, % total

Country of origin	Health Screening	Gastroenterology	Cancer & Neoplasm	Obstetrics & Gynaecology	Cardiology	Orthopaedic Surgery	Others
World	45%	10%	7%	7%	3%	3%	13%
Indonesia	47%	11%	9%	4%	4%	3%	7%
Chinese Mainland	38%	8%	3%	11%	1%	1%	24%

Source: MHTC

Leverage MHTC's partnerships with healthcare facilitators to broaden reach

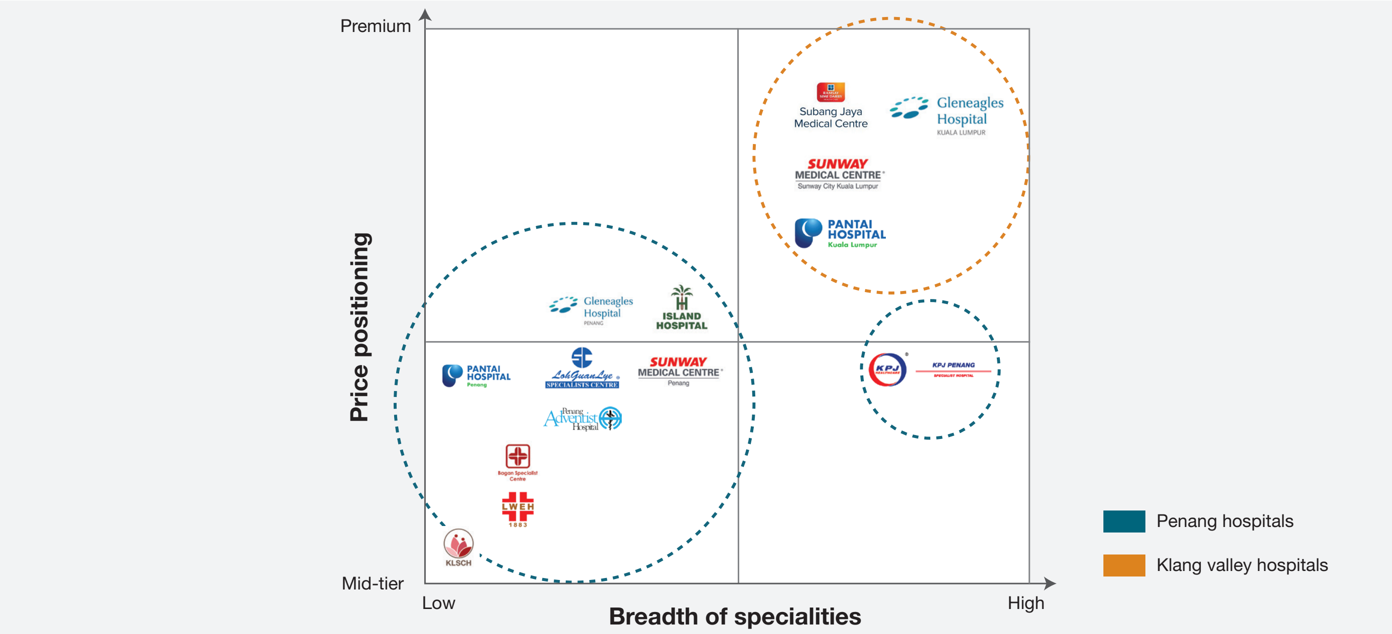
Healthcare facilitators (agents that assist foreign patients in selecting healthcare providers and travel planning) play an important role in the medical tourism industry, often being the primary source of incoming medical tourists. Recently, the MHTC has signed two new MoUs with medical tourism and healthcare facilitators, Passage Asia and Ezy Healthcare. Passage Asia will establish networks with MHTC's member hospitals, organize webinars, health talks and medical education sessions, as well as spearhead marketing efforts across Australia and New Zealand. Meanwhile, Ezy Healthcare's strong presence in Vietnam, Indonesia and Bangladesh is expected to increase Malaysia's brand visibility in these countries.

Enhance on-ground presence in key source locations

Most key private hospitals in Malaysia have established representative offices in key medical tourist source locations to facilitate patient outreach and to strengthen brand presence. Currently, a majority of these offices are located in Tier 1 or Tier 2 cities in Indonesia, with a limited number of representative offices in Indochina, the Chinese mainland and other markets. Sunway Medical Group has the most comprehensive representative office coverage in Indonesia, serving all top medical tourist source locations. Other players such as the Mahkota Medical Centre and KPJ also work with partner agents for patient referrals and to facilitate travel arrangements.

Penang as a medical tourism hub

Penang is currently the top destination choice for medical tourists coming to Malaysia, with about 50 percent of all medical tourists going there for treatment. Penang's popularity can be attributed to the following factors:



Source: secondary research, expert interviews, A&M analysis

1 **Value-for-money:** Penang offers high-quality healthcare facilities, with most top healthcare groups in the country having hospitals located in Penang (Gleneagles, Pantai, Sunway, KPJ, Island Hospital). At the same time, treatment prices in Penang private hospitals are 10–20 percent cheaper on average compared to Kuala Lumpur.

2 **Well-developed infrastructure and health care ecosystem:** Since it is also a tourist destination, Penang already has a broad range of mid-tier to premium hotels and retail malls to cater to different groups of medical tourists. The state government has also established the Penang Centre of Medical Tourism to coordinate and promote medical tourism in Penang.

3 **Direct flight connections to source markets:** Penang International Airport has multiple direct weekly flights to Medan, Jakarta, Surabaya and Banda Aceh in Indonesia as well as Guangzhou, Xiamen and Guilin in the Chinese mainland.

4 **Tourist destination:** Most medical tourists come to Malaysia for health checkups. These tourists generally tend to combine such trips with sightseeing activities, which makes Penang an appealing destination, as Penang is a well-known tourist attraction.

Improvements in transport, infrastructure and hospital expansions are expected to further strengthen Penang's position as the destination of choice.

Hospital Expansions

Currently, there are about 3,240 private hospital beds in Penang. Several top medical tourist hospitals such as Island Hospital and Penang Adventist have announced plans to expand bed capacity, upgrade facilities and deepen specialty offerings to enhance their appeal to medical tourists.

Hospital	Details
Island Hospital	Recently added 300 beds; plans to add another 400 beds (timeline unknown)
Sunway Penang	Addition of 130 beds by mid-2024
Pantai Penang	New hospital block offering 117 beds, which will be ready in 2024
Penang Adventist	Additional 430 beds through multi-stage redevelopment programs (timeline unknown)

Source: company disclosures, A&M analysis

Ecosystem Infrastructure

In addition to expanding bed capacity and upgrading facilities or equipment, selected players have gone a step further by building/owning infrastructure or services which are part of the ecosystem and leveraging it to strengthen their value proposition. For instance, Island Hospital has plans to build Island Medical City, which includes hotel, retail and F&B shops to cater to medical tourists.

Apart from hospitals, the Penang Development Corp and a top property developer in Malaysia are planning to develop a "Medi-Tech City" in Batu Kawan, Penang, over 10 years. Upon its completion, Medi-Tech City will serve as a medical hub providing eco-tourism and global business services with facilities including hospitals, a medical campus, a medical supply hub, corporate suites, a rehabilitation center, a retirement village, hotel, a wellness center, a sports center, electrical and electronics sectors, and a logistics and distribution hub.

Hotels in Penang are also catering to medical tourists. For instance, G Hotel Gurney and G Hotel Kelawai market themselves as being "post-treatment friendly" and partner with private hospitals to offer special stay packages, and Olive Tree Hotel has accommodations and toilets that cater to physically challenged guests.

Transport Linkages

Recently, Xiamen Air launched a new direct flight from Xiamen to Penang, and FlyDubai has also stated its intention to bring in direct flights to Penang from Dubai. The Penang State government is also looking to bring in more direct flights from key new medical tourism markets such as the Chinese mainland (Shanghai, Shenzhen, Beijing, Chengdu) and the Middle East (Abu Dhabi, Doha).

> "We hope to be able to establish direct flights to Abu Dhabi, Dubai, Doha, Chennai, Shanghai, Shenzhen, Beijing, Chengdu, Tokyo, Seoul, Istanbul and Sydney by year-end."
>
> – Penang Executive Councilor for Tourism

Additionally, transport infrastructure is expected to undergo several major enhancements over the coming years.

Expansion of Penang International Airport (PIA) is scheduled to be completed in 2028. This expansion would double PIA's capacity from 6.5 million passengers per annum to 12 million passengers and open even more new flight routes.

Construction of the **Light Rail Transit (LRT)** in Penang, connecting the Bayan Lepas area (near the airport) to the Georgetown area, where most hospitals are located, will also boost medical tourism.

Source: secondary research, news articles, A&M analysis

End-to-end Patient Services

		Island Hospital	KPJ Healthcare	Pantai Hospital	Ramsay Sime Darby Health Care	Sunway Healthcare	Mahkota Medical Centre	Thomson Medical
Immigration	Visa application and extension	Yes	Visa application only	Limited	Yes	Yes	Limited	Limited
Travel	Transport (Flight, airport transfer)	Yes	Yes	Provide recomm	Yes	Airport transfer only	Limited	Airport transfer only
	Hotel booking	Yes	Yes	Provide recomm	Yes	Yes	Limited	Provide recomm
Hospital Stay	Language support	English, Mandarin, Bahasa and 4-5 SEA dialects	Interpreter service available	Interpreter service available	Interpreter service available	Interpreter service available	Basic interpreter services	English, Mandarin, Bahasa and Tamil
	Facilities	F&B, Luggage storage, shopping	F&B	Dietary and food services	F&B	Dietary and food services	F&B, money changer, retail pharmacy	F&B, Retail, Parking/ Valet
	Local sightseeing	Provide recomm.	Arrange local tours	Provide recomm	Limited	Limited	Limited	Limited
	Others	Medicine delivery; Insurance claim status and appt reminders	Limited	Pre-appt consultation	Bill estimtion	Assist in medical Arrange for transfer; second opinion	Limited	Limited

Best-in-class

Source: company disclosures, secondary research, A&M analysis

Part of Malaysia's appeal to medical tourists is a well-developed healthcare travel ecosystem. One of the MHTC's key focus areas is promoting tourist hospitality and a seamless patient journey to provide the best healthcare travel experience in the region. Most top medical tourism hospitals in the country provide additional services catering to the needs of international health travelers, from visa application and travel bookings to foreign language/interpreter services at hospitals and local sightseeing recommendations. In this regard, Island Hospital is the clear leader with best-in-class medical tourist services.

Conclusion

Malaysia has the right combination of factors to be a global leading medical tourism destination with value-for-money quality healthcare facilities, well-developed medical tourist infrastructure (transport connections, hotels, visa facilitation), strong government support (international marketing, strategic alliances) and abundant sightseeing options for patients seeking to combine the trip with a holiday. Within Malaysia, Penang and Kuala Lumpur are the top medical tourist destinations with most top private hospitals located in these areas and good ecosystem infrastructure, with Penang holding a slight advantage over Kuala Lumpur due to more affordable prices and reputation as a tourist attraction. Key imperatives for players looking to tap into this segment include expansion of promotional efforts and building on-the-ground presence in new markets (the Chinese mainland, the Middle East), capability enhancement to attract high-value treatments and provision of end-to-end international patient services.

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