

Advancing Healthcare Tourism in Malaysia through the Implementation of the Flagship Medical Tourism Hospital Programme

Farizal Jaafar*, Lily Jasmin Abd Halim †, Ch'ng Zi Man †, Devaraj Subramaniam ‡, and Marale Atechian §

*Acting Chief Executive Officer, Malaysia Healthcare Travel Council, Kuala Lumpur, Malaysia

Email: farizal.j@mhtc.org.my

†Corporate Strategy, Malaysia Healthcare Travel Council, Kuala Lumpur, Malaysia

Email: lily.jasmin@mhtc.org.my; chng.zm@mhtc.org.my

‡APAC Consulting Team, IQVIA Solutions Malaysia, Malaysia

Email: devaraj.subramaniam@iqvia.com

§Principal Consultant, Joint Commission International, Riyadh, Kingdom of Saudi Arabia

Email: MAtechian@jcrinc.com

Abstract—Access to quality healthcare and advanced treatments has led to a growing demand for medical tourism. In 2019, an estimated 15 to 20 million individuals globally travelled abroad for medical purposes and the growth of this market is expected to double in the coming years. Patients are drawn to seeking healthcare and medical treatment abroad, primarily due to several factors, including the potential for cost savings, shorter waiting times for treatments, and a wider range of quality healthcare options. Recognising this trend, numerous countries are intensifying their efforts to develop and promote their respective medical tourism industries, with the goal of becoming the preferred destination for patients seeking treatments abroad. Notably, in certain countries, government agencies are spearheading initiatives to accelerate industry growth, which holds significant potential to contribute to the countries' economic development. Asia emerges as the principal beneficiary of the industry, garnering substantial demand from both domestic and international patients. In Malaysia, the Malaysia Healthcare Travel Council and the Ministry of Health Malaysia have developed the 5-year Malaysia Healthcare Travel Industry Blueprint with the aim to provide “the best healthcare travel experience”. As part of the strategic initiatives outlined in the blueprint, a first-of-its-kind Flagship Medical Tourism Hospital Programme was designed as an effort to reinforce Malaysia's position as a leader in the medical tourism market, improve healthcare quality, and contribute to economic growth. This paper aims to discuss the Flagship Medical Tourism Hospital Programme and the assessment methodology employed for Malaysian hospitals participating in this programme. Additionally, strategies for capacity building and revenue growth within the programme, and benefits towards the nation and beyond are reviewed. The programme's success in developing flagship medical tourism hospitals within Malaysia positions it as an exemplary model for other nations seeking to establish their own thriving medical tourism industry.

Index Terms—medical tourism; medical travel; healthcare destination; Malaysia healthcare.

I. INTRODUCTION

The search for quality healthcare has propelled individuals to travel across international borders for medical treatment, also known as medical tourism. Driven by the needs of an

increasingly elderly population for medical procedures with high quality service and challenges such as high treatment costs and long waiting times, the tourism and medical sectors of many countries have developed strategies to seize opportunities within this market [8]. In 2019, it was estimated that approximately 15 to 20 million individuals globally travelled abroad for medical purposes, contributing to a total market size of around US\$ 33 billion [7]. The growth of this market is expected to double in the coming years, driven by the increasing demand from patients. While the market experienced a 10% annual growth rate from 2013 to 2018, it is projected to accelerate to approximately 20% annually from 2021 to 2027 [1]. The global medical tourism market stands poised to present remarkable opportunities for both the healthcare industry and nations at large, thereby holding the potential to revolutionise the way healthcare services are delivered and positively impact economic growth on a global scale.

Asia emerges as the principal beneficiary of the flourishing medical tourism industry, garnering substantial demand from both domestic and international patients. By 2025, the Asia-Pacific (APAC) region is forecasted to become the largest medical tourism market globally, accounting for approximately 34% of the global medical tourism revenue [2], with the primary customer groups originating from Asia Pacific (APAC), Europe, and the Middle East [1]. The region's favourable attributes, including advanced healthcare infrastructure, cutting-edge medical technologies, and a convergence of skilled healthcare professionals, position it as a highly sought-after destination for medical tourism. This trend not only signifies Asia's ascendancy in the global healthcare landscape but also highlights its pivotal role in driving economic growth and development through the influx of medical tourists from around the world.

In Malaysia, the government plays a significant role in growing the medical tourism market. The Malaysia Healthcare Travel Council (MHTC) [3], an agency established under the

purview of the Ministry of Health Malaysia [6], tasked to facilitate, and promote the healthcare travel industry, under the “Malaysia Healthcare” brand. In November 2021, MHTC [3] launched the Malaysia Healthcare Travel Industry Blueprint 2021 to 2025, officiated by the Minister of Health Malaysia [3], [4], [6]. The blueprint aims to enhance the healthcare travel ecosystem, strengthen the Malaysia Healthcare brand, and expand Malaysia’s healthcare offerings to more targeted markets [4]. The aspiration is to provide the “Best Malaysia Healthcare Travel Experience by 2025” to healthcare travellers and achieve revised industry revenue of MYR 2.4 billion (US\$ 513.4 million) from medical bills and spillover effect of more than MYR 9.6 billion (US\$ 2 billion) to other industries (including ancillaries and tourism spending) by 2025 [1], [4]. Aligning to the Industry Blueprint, ‘Malaysia Healthcare’ remains committed in strengthening Malaysia’s position as the leading global healthcare destination with synergistic public-private partnership, from government stakeholders to private industry players [4].

As an integral part of the five-year Malaysia Healthcare Travel Industry Blueprint, the FMTH Programme plays an instrumental role in transforming the healthcare travel ecosystem. With the debut of the FMTH Programme in the country, MHTC [3] aims to reinforce Malaysia’s position as a safe and trusted destination for high-quality healthcare services and seamless end-to-end patient experience [4]. Malaysia’s healthcare travel industry is unique in a sense that all private healthcare providers are stringently monitored by the Ministry of Health. The FMTH Programme will serve as the future torchbearer for Malaysia Healthcare, not only locally but also internationally, significantly contributing to the country’s export service, with expectations for Malaysian healthcare to be significantly on par or above renowned international hospitals, namely in Thailand, Singapore, Korea, Taiwan, and more. This paper aims to introduce the FMTH Programme, discuss the assessment methodology employed for Malaysian private hospitals participating in this programme, strategies for capacity building and revenue growth within the programme, and benefits towards the nation and beyond that would advance Malaysia’s position within the global medical tourism market.

The rest of the paper is structured as follows. Section 2 discusses the mechanisms of the FMTH Programme, its assessment methodology, the key enablers for capacity building and revenue growth, as well as the broader impact on Malaysia’s healthcare travel industry and the nation. Section 3 concludes the paper and lists future work directions.

II. DISCUSSION

A. Flagship Medical Tourism Hospital Programme Mechanism

The FMTH Programme acts as a catalyst to drive and elevate Malaysia’s private healthcare services, in order to accelerate the medical tourism growth [4]. MHTC [3] aims to identify flagship medical tourism hospitals in the country and accelerate their capability building and revenue growth

[4]. The goal of the programme is to establish and garner international recognition for the Flagship Medical Tourism Hospitals [4]. The national programme spans across five years, from 2021 to 2025, to achieve key targets of direct healthcare investment and increase healthcare travellers’ revenue, which directly drives a four-fold multiplier effect to ancillaries and the tourism industry [9].

The FMTH Programme involves the invitation of 22 leading private hospitals from Klang Valley, Malacca, Penang, and Johor Bahru, which are part of MHTC’s Elite Members, for participation [4]. The Members who agreed to participate are required to go through stringent assessments before identifying the four FMTH finalists in 2022. The assessments undertook data-driven methodology covering 51 metrics across the three key programme pillars of Medical Excellence, Service Excellence, and International Branding (see Figure 1). As a result, four hospitals were selected as FMTH finalists, namely Institut Jantung Negara or National Heart Institute in Kuala Lumpur, Island Hospital in Penang, Mahkota Medical Centre in Melaka, and Subang Jaya Medical Centre in Selangor [4].

The FMTH finalists are then required to undergo the three-year Acceleration phase for capability building and revenue growth acceleration from 2023 to 2025 [4]. The implementation focus during the Acceleration phase includes programme management, training and development by the industry experts, activation of programme enablers and global brand profiling of the programme and Flagship finalists [4]. The growth and development of the Flagship finalists will be continuously assessed against the international best practices and benchmarks based on the three strategic programme pillars.

The four Flagship finalists will be required to undergo a final round of assessment and selection in the third quarter of 2025 [4]. The Flagship hospital(s) will be eventually identified in the fourth quarter of 2025 [4]. The highest recognition of the Flagship hospital(s) will then be announced by the Honourable Prime Minister of Malaysia in 2025 [4].

B. Assessment Methodology

The overall assessment and selection of the FMTH Programme is carried out by an independent and specialised Programme Management Advisor (IQVIA Solutions Malaysia) and Programme Assessment Advisor (Joint Commission International (JCI)) [4]. The assessments are conducted based on data submission and rigorous onsite assessments (including leadership interviews, patient journey interviews, facility and environment of care visits, healthcare travellers’ interviews and validation of data and documents), focusing on the three strategic pillars – Medical Excellence, Service Excellence and International Branding.

1) *Medical Excellence*: The overall selection process for the pillar of medical excellence involved a comprehensive review of specific parameters to ensure the highest standards of patient safety and quality of care. These included patient safety requirements such as clinical documentation adequacy, falls for outpatient care, medication error rate, return visits to the

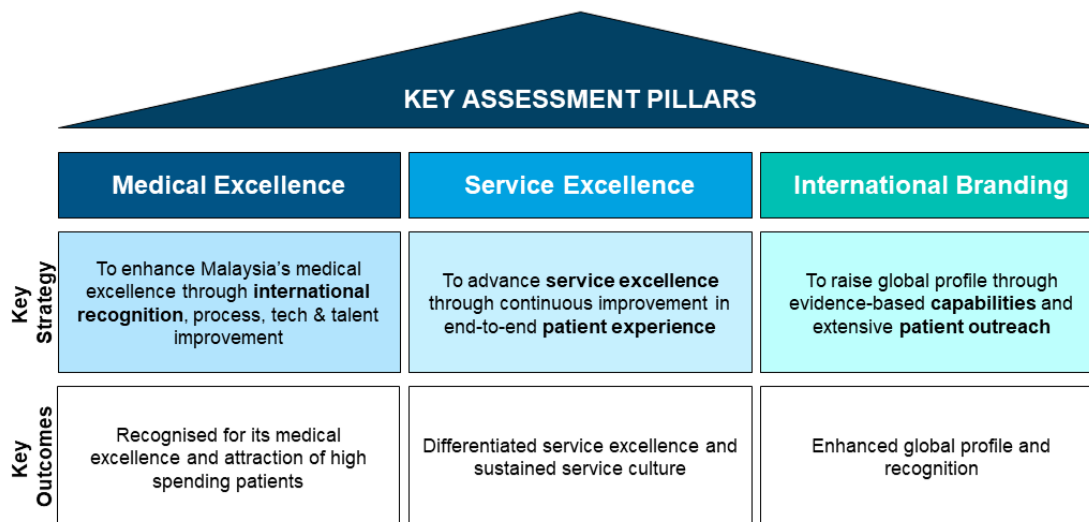


Fig. 1. Strategic pillars of the FMTH Programme.

emergency room, postponement of surgeries, unplanned return to the operating room, cardiopulmonary arrests outside critical care, healthcare-acquired infection rate, unplanned transfers to acute care for one-day surgeries, procedural sedation rate, complications in invasive procedures and 30-day postoperative mortality rate [4].

In addition, the process considered the availability of innovative medical technologies, international lab accreditation, centre of excellence international recognition, ongoing staff performance evaluation, job-related training hours per healthcare personnel and the percentage of medical staff who graduated from top global programmes [4].

Thereafter, an onsite assessment of the hospital's performance was conducted, covering the following five key dimensions [4]:

- **Strategy and Culture of Safety** is a key dimension demonstrating the commitment and support of the governing entity and the executive leadership to the strategic initiatives of the organization. Within the context of the FMTH, medical tourism is considered as a strategic goal, and it should be part of the governing entity priorities and a standing discussion item on the meetings' agenda. This dimension should also reflect the amount of investment and resources allocated to medical tourism.

In addition, medical travellers need to receive care with the utmost safety. A culture of safety is key in providing a high-quality care and to create an environment where errors become learning points that drive improvement. This culture aims towards high reliability and pursuit of zero harm.

- **Healthcare traveller's medical journey** follows

the experiences of medical travellers to evaluate the hospital's performance against international standards. It is a key approach to sequentially follow the course of care, treatment, and services received by the medical travellers from preadmission through post discharge and recovery. It evaluates the preadmission screening, assessments, the course of care, treatment and services provided to the medical travellers by and within the hospital by reviewing the medical travellers' medical record, conducting various interviews for medical travellers and the healthcare providers. The journey assesses the interrelationships between and among disciplines including the review of the pre-admission education, instruction, and the follow-up care post discharge, and addresses the communication methods including language preference and cultural considerations. Travellers' privacy and confidentiality is paramount and an expectation that the hospital should guarantee within this journey.

- **Environment of care and facility review** is a key dimension to ensure that the physical environment of the hospital is safe, secure, and does not pose a physical risk to patients, families, staff, and visitors. The hospital should have measures implemented to limit access to sensitive areas of the hospital.

Hospital fires remain one of the top hazards for any healthcare organisation. Therefore, the expectation is to ensure the implementation of a robust fire safety programme including the early detection, containment and suppression of fire, proper maintenance of fire safety equipment and clear, unobstructed fire exits. This dimension also focuses on the safe maintenance and operation of the medical equipment and utilities.

The organisation should have redundancies in place in relation to the utility system to support essential services and ensure it is operated effectively and efficiently to meet the needs of the patient. The treatment preparation areas are functionally separated and respect the industry standards for safe medication preparation.

- **Internationally recognised Centres of Excellence (CoE)** involves recognition of effective and high-quality service and management tools using evidence-based, sponsored clinical practice guidelines. This dimension focuses on the commitment of the organisation to excellence whereby the collaboration of programmes throughout the organisation acts as a testimony towards the centre of excellence, and contains the structure, resources, and support it needs to be successful and to provide the desired clinical outcome.

All patients with the same medical condition or disease receive the same high-quality care, treatment, and services as reflected in the programme's scope of services and mission. Medical research and development, including participation in clinical trials and scientific publications, play an important role in advancing medical knowledge and improving patients' medical outcomes. These series of initiatives in building the international CoE strive to stay at the forefront of medical innovation and contribute to the overall progress of healthcare at the global level.

- **Information management and technology in healthcare** can significantly improve patient safety by automating and streamlining healthcare services for the seamless transition of patient health information and offering safety mechanisms that have the potential to reduce the risk of error. For example, medication errors can be greatly reduced through the implementation of a computerised prescribing mechanism and the use of barcodes for medication administration to ensure adequate patient identification.

Integration of new technology with the existing systems is an important criterion and aids the hospital's assessment of opportunities for the optimisation of existing processes, including those that could be enabled by new technology. When mobile devices are used for texting, emailing, or other communications of patient data and information, the hospital should implement processes to ensure quality of patient care and maintain security and confidentiality of patient information. It is an expectation that the hospital develops, maintains, and tests any programmes to account for planned and unplanned downtimes and to ensure adequate continuum of care for medical travellers.

2) *Service Excellence*: The hospital's performance in service excellence is measured based on five key dimensions [4]:

- **Patient centricity performance** - Patient centricity is the compass that guides hospitals towards personalised care, empowering patients with dignity and involvement, fostering trust, and ultimately improving health outcomes. By placing patients at the heart of their services, hospitals cultivate an environment of empathy, collaboration, and quality, elevating the overall healthcare experience. This dimension evaluates hospital's initiatives to constantly enhance patient satisfaction and retention. Metrics assessed include patient satisfaction score, patient retention rate, and patient complaints.
- **Operational performance** - Operational performance is the backbone of hospital service, ensuring efficient processes, timely care delivery, and optimal resource management. By prioritising operational excellence, hospitals can enhance patient safety, streamline workflows, and maximise their ability to meet the ever-evolving healthcare needs of their communities. The dimension covers process efficiency in various departments in the hospitals including patient service department, outpatient clinics, pharmacy department and radiology department/ diagnostic clinic. Metrics assessed include waiting time for phone/ email enquiries, Specialist Outpatient Clinics (SOC) waiting time, and diagnostic turn-around time.
- **Innovation and technology enablers** - Innovation and technology enablers are vital in hospital services, revolutionising healthcare delivery, enhancing diagnostic accuracy, and enabling remote care. By embracing advancements, hospitals can improve efficiency, patient outcomes, and access to care, paving the way for a brighter and more interconnected future of healthcare. This dimension evaluates the level of technology adoption in enhancing patient satisfaction. Metrics assessed include process automation/digitalisation, accessibility of patient communication/request platform, and internet connectivity.
- **Service offering enablers** - Service offering enablers play a crucial role in hospital services by meeting diverse patient needs. By continually evolving and enhancing their service offerings, hospitals can provide comprehensive, tailored care that addresses the unique requirements of every individual, fostering improved patient satisfaction and outcomes. The dimension covers the initiatives that hospitals have implemented to further enhance patient journey in and outside of hospitals. Metrics assessed include spectrum of language interpretation, travel arrangements, and on-arrival service.

- **Infrastructure enablers** - Infrastructure is the cornerstone of effective hospital services, providing the physical foundation for quality care. Robust infrastructure ensures seamless operations and creates a conducive environment for healthcare professionals to deliver timely and comprehensive treatments, ultimately enhancing patient experiences. This dimension evaluates the quality of the infrastructure as a place of living. Metrics assessed include facility hygiene, availability of international patient centres, prayer rooms, quality of staff and facilities, availability and variety of restaurants, and availability of leisure facilities (e.g., convenience stores, recreational spaces).

3) *International Branding*: The hospital's performance in international branding is measured based on four key dimensions [4]:

- **Global presence/ branding performance** - A global presence in medical tourism allows hospitals to attract patients from around the world. By establishing themselves as trusted destinations for international healthcare, these hospitals attract affluent patients seeking high-quality medical services abroad. This dimension evaluates the hospital's branding effort in the target medical tourist countries. Metrics assessed include international recognition and awards, number of countries with brand presence, and the conversion rate from international enquiries to facility visits.
- **Corporate Social Responsibility (CSR) and health diplomacy performance** - CSR and health diplomacy initiatives are essential as they demonstrate commitment to ethical practices, community engagement, and sustainable healthcare. By actively addressing social and environmental concerns as well as engaging in health diplomacy, these hospitals not only enhance their reputation but also contribute positively to the local communities they operate in. They promote inclusive healthcare access, foster long-term partnerships, and contribute to diplomatic efforts in addressing health challenges at both the national and international levels. The dimension covers the hospital's investment in building reputation through CSR and health diplomacy. Metrics assessed include CSR initiative numbers, spend, impact, geographical coverage of target countries, and the effectiveness of health diplomacy activities.
- **Marketing & promotion enablers** - Marketing and promotion enablers help raise awareness, attract international patients, and showcase the hospital's unique offerings. Effective marketing strategies and promotion efforts position the hospital as a preferred destination for medical tourism, increasing visibility, credibility, and ultimately driving patient volume, revenue, and

sustainable growth. This dimension evaluates the effectiveness of the hospital's overall medical tourism marketing strategy. Metrics assessed include international marketing budget, number of online and offline channels utilised, and quality of marketing messaging among others.

- **Sustainable Development Goals (SDGs) and Environmental Sustainable Governance (ESG) performance** - The incorporation of SDGs and ESG principles into hospitals can have significant impacts in promoting global sustainability, enhancing hospital's brand reputation, strengthening community engagement and contributing to the long term wellbeing of patients, staff as well as the environment. The evaluation dimensions include the alignment of hospital's strategies, policies, and actions to both the SDGs and ESG goals as well as the integration into hospital's practices. Metrics assessed include the effectiveness of implementation and impact measurements.

C. Accelerating Capacity Building and Revenue Growth

Throughout the Acceleration phase from 2023 to 2025, programme management plays a key role in strengthening and elevating the bar of excellence in delivering exceptional end-to-end services to patients of the finalists, further reinforcing Malaysia's position as a safe and trusted destination for healthcare. The components of programme management include the charting and activation of the 2023 to 2025 Flagship Acceleration Plan including Key Performance Index (KPI) from each finalist as well as the programme mentoring and monitoring by the appointed advisors [4].

Furthermore, the Acceleration phase will be guided by the global industry experts via a series of training and development programmes [4]. This includes the C-suites coaching on healthcare innovation and transformation as well as the customised training modules for the hospital personnel. This initiative directly supports the achievement of KPI targets set in the finalists' Acceleration plan.

FMTH also plays a catalytic role in expediting international recognition of the Flagship finalists. The active commitment and participation of the finalists in delivering medical and service excellence will eventually lead towards cultivating international branding. Extensive initiatives on global brand profiling for FMTH have commenced through evidence-based capabilities and patient outreach, some of which have strong presence within the government ministries [4].

In support of the finalists' Acceleration plan, the finalists are granted with several enablers, as listed below. The successful activation of all the enablers is the result of the collaborative effort from the various government ministries and agencies [4].

- **Investment Tax Allowance (ITA)** - Hospital investment is supported through the provision of additional ITA on qualifying capital expenditure including healthcare

technology.

- **Fast Track Facilitation** - Finalists' applications are subject to expedited approvals to support development milestones as per the acceleration journey, with a designated committee that oversees the approval process related to renewals, facility improvement, onboarding niche specialists, among many others.
- **Healthcare Technology Sandbox** - Hospitals are granted flexibility of testing concepts that support medical and service excellence or improve patient experience in a sandbox. The tested concepts may be related to use of digital health & healthcare innovation.
- **Programme mentors and advisors** - Finalists gain access to programme advisors and industry experts that guide them on growth and development, programme monitoring and mentoring, KPI tracking, and more.
- **National endorsement and recognition** - The four Flagship finalists were announced by the Minister of Health, Malaysia in March 2023. The Flagship Hospital(s) will eventually be recognised and awarded by the Honourable Prime Minister of Malaysia in 2025.

D. Advancing Healthcare Industry and the Nation

In addition to the participating hospitals, the FMTH Programme brings long-term benefits to the development of Malaysia's healthcare industry and the nation. The national programme provides the country's hospitals and medical professionals with global exposure and opportunities to establish standing and reputation as the top global medical tourism destination. The programme also enables the nation's healthcare industry to challenge the position of popular medical tourism destinations (i.e., Thailand and Singapore) in the APAC region and to future-proof Malaysia and the region.

The economic impact of the FMTH Programme is immense. In terms of direct economic impact on the health tourism industry, the programme is expected to contribute 30% - 35% of the total healthcare traveller's revenue of MYR 2.4 billion (US\$ 513.3 million) in 2025 [1]. This is almost double the growth in comparison to the achievement in 2022 [1]. In terms of indirect economic impact, approximately MYR 9.6 billion (US\$ 2 billion) in revenue from economic spill over (ancillary and tourism spend) is forecasted in 2025, representing a MYR 4.4 billion (US\$ 941.2 million) increase from 2022 [1]. In addition, domestic and foreign direct investments to boost medical tourism in Malaysia by 2025 are estimated to be MYR 1.0 billion (US\$ 213.9 million) and MYR 500-700 million (US\$ 106.9 - 149.7 million), respectively [5]. Hospital construction, operational expansion and healthcare digitalisation also contribute to the creation of more jobs, employment opportunities for locals, tax generation and fiscal impacts.

III. CONCLUSION AND FUTURE WORK

The FMTH Programme is an innovative and game-changing initiative implemented by MHTC [3] to raise Malaysia's healthcare profile as home to globally recognised healthcare icons. Through strategic public-private partnerships, strong leadership culture and unwavering commitment, this ground-breaking programme successfully elevates the finalists into world-class healthcare facilities.

The programme impact extends beyond the individual finalists, stimulating various sectors of the economy and contributing to overall industry development. By attracting health tourists and their companions, Malaysia experiences increased revenue in tourism, hospitality, transportation, ancillary services and more within the healthcare travel ecosystem. This eventually creates employment opportunities and fosters the growth of local businesses, establishing a virtuous cycle of economic prosperity.

In summary, the FMTH Programme is revolutionising the Malaysia Healthcare landscape, showcasing Malaysia as a world-renowned and credible global healthcare brand. The programme's success in developing flagship medical tourism hospitals within the country positions it as an exemplary model for other nations seeking to establish their own thriving medical tourism industry. The programme's accomplishments serve as a source of inspiration and guidance for these countries, providing them with valuable insights and best practices to emulate.

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