

Benchmarking Patient Journey in Southeast Asian Medical Check-Up Tourism

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Abstract: This study explores benchmarking and patient journey strategies of medical check-up (MCU) services within the context of health tourism in Southeast Asia. Despite Indonesia's extensive healthcare infrastructure that meets international standards, a significant number of Indonesians still seek medical services abroad, particularly in Malaysia, Thailand, and Singapore, including for preventive health check-ups. This phenomenon indicates existing gaps in service quality, patient experience, and system coordination within Indonesia's healthcare sector. The research aims to identify best practices in patient-journey management and benchmarking models from leading ASEAN countries to enhance Indonesia's competitiveness in preventive health tourism. Using a qualitative comparative approach, the study analyzes hospital service systems, promotional frameworks, and patient-experience dimensions through Reflexive Thematic Analysis. The findings reveal that Malaysia's integrated healthcare travel ecosystem, Thailand's hospitality-oriented medical services, and Singapore's digitally efficient healthcare systems provide valuable benchmarking insights. Based on these findings, the study proposes a conceptual model that links clinical quality, operational efficiency, hospitality orientation, digital integration, and policy coordination to patient-journey effectiveness. This model contributes to theoretical and practical frameworks for strengthening Indonesia's medical tourism industry and positions MCU services as a strategic entry point to improve patient satisfaction, build trust, and encourage cross-sector collaboration.

Keywords: Medical Tourism, Benchmarking, Southeast Asia, Medical Check-up

Introduction

Health tourism has rapidly evolved into a competitive global industry that merges healthcare services, hospitality, and travel experiences. In Southeast Asia, Malaysia, Thailand, and Singapore have successfully positioned themselves as international medical-tourism destinations, combining clinical excellence and coordinated policy with superior patient experience (Zain et al., 2023). Their success has made the region one of the fastest-growing health-tourism hubs globally. Meanwhile, Indonesia despite its large population and adequate healthcare capacity remains a major exporter of medical tourists, losing both patients and foreign exchange to its neighbors (Asa et al., 2023). In 2023, over two million Indonesians sought medical services abroad, with Malaysia and Singapore as top destinations (Mulyani et al., 2023). This persists even though Indonesia has met WHO's hospital-bed ratio of 1.38 per 1,000 people and maintains more than 3,000 hospitals and 10,000 primary health centers nationwide. The issue lies not in facility quantity but in gaps in patient experience, trust, and integration (Rahmat et al., 2021). Patients perceive foreign hospitals as more reliable, comfortable, and transparent, reinforcing outbound medical travel patterns (Thelen, 2023). MCU services represent a promising yet underdeveloped component of Indonesia's health-tourism potential. These preventive and non-invasive services can easily integrate with leisure, making them ideal for tourism linkage (Amalorpavanathan, 2024). Countries such as Malaysia and Thailand have leveraged MCU as a gateway for wellness tourism, building trust and loyalty among patients (Zain et al., 2023). For Indonesia, strengthening MCU services could serve as a strategic entry point to shift from being a patient-exporting nation to a regional health-tourism hub (Gholipour et al., 2025).

Accordingly, this study aims to examine how medical check up services are positioned and managed within the health tourism strategies of selected Southeast Asian countries, namely Indonesia, Malaysia, Thailand, and Singapore, with particular emphasis on patient journey design and service integration. The research seeks to identify key benchmarking dimensions that differentiate successful MCU based medical tourism systems, including clinical service quality, operational efficiency, digital integration, hospitality and tourism linkage, and policy coordination. By conducting a comparative analysis of institutional frameworks, service pathways, and patient experience mechanisms, this study aims to capture best practices that contribute to trust building, satisfaction, and repeat utilisation among medical tourists. Furthermore, the study aims to develop a conceptual model that explains the relationship between benchmarking practices and patient journey effectiveness in preventive health tourism. Ultimately, the findings are expected to provide strategic insights for policymakers and healthcare providers in Indonesia to strengthen MCU services as an entry point for developing a more competitive, integrated, and sustainable medical tourism ecosystem.

Methods

This study employed a qualitative comparative case study design focusing on medical check-up services in Indonesia, Malaysia, Thailand, and Singapore to examine differences in patient journey management and medical tourism strategies across national contexts. A qualitative descriptive–analytical approach was adopted to generate in-depth and contextualised understanding of service practices and institutional policy arrangements underpinning the delivery of medical check-up services in each country. Data were collected through in-depth interviews with key stakeholders, analysis of institutional and policy documents, and review of relevant secondary sources to ensure comprehensive triangulation of service structures, governance arrangements, and patient experience mechanisms (Asa et al., 2023). Library-based research was conducted through systematic examination of academic books, peer-reviewed journals, and previous empirical studies relevant to healthcare services and medical tourism. The data were analysed using Reflexive Thematic Analysis following the Braun and Clarke framework, combined with cross-case benchmarking to enable systematic comparison of emerging patterns across countries. An inductive analytical process was applied to generate systematic, factual, and in-depth findings in line with the research objectives. Benchmarking dimensions encompassing clinical and service quality, operational efficiency, digital integration, hospitality and tourism linkages, and governance coordination were derived from established theories of benchmarking and health tourism competitiveness and applied as analytical lenses throughout the study (Gholipour et al., 2025). The research procedures were conducted in accordance with ethical approval requirements, and strict confidentiality as well as informed consent protocols were maintained to ensure the protection of participants and institutional data.

Results and Discussion

The comparative analysis of medical check-up (MCU) services across Indonesia, Malaysia, Thailand, and Singapore revealed significant disparities in how each country structures, manages, and delivers patient journeys within the broader context of medical tourism. Although all four countries possess substantial healthcare capacity, the degree of service integration, policy coordination, digital interoperability, and tourism linkage varies considerably, shaping their respective competitive positions. The findings suggest that the key differentiator is not merely clinical quality but the systemic ability to orchestrate a seamless, trust-driven patient journey from pre-arrival to post-treatment engagement.

Malaysia demonstrates the strongest ecosystem alignment, driven by coordinated national branding and institutional support through the Malaysia Healthcare Travel Council (MHTC). The presence of internationally accredited private hospitals, transparent pricing policies, concierge-style travel assistance, and bundled preventive care packages reinforce Malaysia's reputation as a reliable and patient-friendly destination. These characteristics position MCU not only as a standalone service but as a gateway to long-term medical engagement, particularly for

Indonesian patients seeking preventive and specialist follow-up care abroad (Zain et al., 2023). The structured patient flow from online registration to cross-provider referrals reduces uncertainty and strengthens perceived safety, ultimately increasing repeat visits and long-term loyalty.

Thailand, in contrast, excels through its hospitality-centered medical tourism model. While its clinical infrastructure may not always match Singapore in digital sophistication or Malaysia in institutional coordination, Thailand leverages its leisure appeal and wellness-based packages to create emotionally comforting service experiences. MCU programs are commonly integrated with spa recovery stays, wellness resorts, and tourism facilitators, enabling patients to associate healthcare with leisure rather than illness. This reinforces Thailand's positioning as a holistic medical-wellness hub and demonstrates that patient journey satisfaction may arise from emotional reassurance rather than clinical intensity (Amalorpavanathan, 2024). The country's experience confirms that medical tourism performance is not solely determined by clinical outcomes but also by affective and cultural alignment.

Singapore leads technologically, driven by its national digital health architecture, standardized electronic health records (EHR), and high levels of clinical specialization. Its MCU services are embedded within hospital systems emphasizing precision diagnostics and digitally automated referrals. Although tourism linkage is less emphasized compared to Thailand, Singapore's competitive advantage lies in speed, accuracy, and interoperability of medical data, making it a preferred destination for high-trust, high-efficiency preventive screening among global elites and complex-case patients (Chen et al., 2024). However, Singapore's premium pricing structure and limited tourism bundling reduce accessibility for middle-income foreign patients, including those from Indonesia.

Indonesia remains the weakest among the four countries in terms of medical tourism readiness despite its significant healthcare infrastructure. The challenges identified are structural rather than clinical: fragmented service pathways, limited institutional coordination, absence of a national medical tourism authority, lack of standardized cost transparency, and underdeveloped digital platforms. Patient journeys are often disjointed, beginning with referrals or inquiries made externally through travel agents rather than centralized healthcare gateways. Patients face inconsistencies in service flow, delays in results retrieval, and limited integration between post-MCU follow-ups and specialist services. These conditions sustain the perception that healthcare abroad is more reliable, transparent, and predictable (Rahmat et al., 2021; Mulyani et al., 2023), thereby reinforcing outbound medical travel patterns.

The results highlight that successful MCU-based medical tourism is characterized by three converging features: (1) institutional coordination between healthcare and tourism sectors, (2) digitized patient navigation systems enabling frictionless movement between service nodes, and (3) experience-based value propositions that build psychological trust. Countries that excel in these dimensions Malaysia, Thailand, and Singapore do not treat MCU as a transactional service but as an entry point to a relationship-centric cross-border healthcare ecosystem. Conversely, Indonesia's current system positions MCU as a standalone service without strategic alignment to national tourism development or long-term clinical engagement.

These results affirm the conceptual pathway proposed in this research: that robust benchmarking practices across service quality, operational efficiency, digital integration, hospitality orientation, and governance coordination directly shape patient journey excellence, which in turn affects perceived trust, satisfaction, and loyalty. Thus, the competitive strength of a nation's medical check-up tourism offering lies not solely in clinical infrastructure but in how effectively the healthcare ecosystem transforms preventive services into sustained transnational patient relationships.

Five key benchmarking dimensions emerged: Clinical and Service Quality, Operational Efficiency, Digital Integration, Hospitality and Tourism Linkage, and Policy Coordination. Malaysia demonstrates strong private-hospital networks and JCI-accredited facilities (Zain et al., 2023). Thailand shows seamless wellness packages and lean processes (Amalorpavanathan, 2024). Singapore leads with advanced EHR and telehealth systems (Xu et al., 2020). Thailand emphasizes patient comfort and cultural familiarity (Zain et al., 2023). Malaysia's MHTC model aligns

stakeholders effectively (Gholipour et al., 2025). Indonesia lags primarily in integration and digital coordination. These gaps confirm the necessity of adopting benchmarking-driven reforms focused on patient experience (Rahmat et al., 2021). The proposed conceptual model Benchmarking Dimensions → Enhanced Patient Journey → Satisfaction & Loyalty → Competitiveness— mirrors prior findings that highlight the role of quality perception in health-tourism performance (Thelen, 2023; Fetscherin & Stephano, 2016).

The emergence of five key benchmarking dimensions, namely clinical and service quality, operational efficiency, digital integration, hospitality and tourism linkage, and policy coordination, indicates that competitiveness in MCU based medical tourism is shaped by systemic orchestration rather than isolated improvements at the facility level. Malaysia demonstrates how strong private hospital networks, international accreditation, and transparent service packages can reduce patient uncertainty and strengthen perceptions of reliability, while Thailand differentiates itself through lean service processes and the integration of MCU with wellness and leisure programmes that reframe healthcare as a restorative and emotionally reassuring experience. Singapore, on the other hand, leverages advanced electronic health records and telehealth systems to enable rapid diagnostics, seamless referrals, and continuity of care, positioning MCU within a high precision preventive pathway. These contrasting approaches suggest that while each country prioritises different dimensions, their competitive advantage lies in how effectively these elements are integrated into coherent and predictable patient journeys rather than in excellence within any single dimension.

In contrast, Indonesia's relative weakness across these benchmarking dimensions, particularly in service integration and digital coordination, results in fragmented patient pathways, inconsistent service flows, and limited continuity between preventive screening and specialist follow up care. The absence of strong institutional coordination between healthcare providers, tourism stakeholders, and government agencies further constrains the development of MCU as a nationally positioned health tourism product, causing services to remain hospital centred and transactional in nature. These structural gaps support the conceptual model linking benchmarking practices to improved patient journeys, which subsequently shape satisfaction, trust, and long term loyalty, ultimately determining national competitiveness in medical tourism. Therefore, reform efforts should prioritise patient navigation systems, interoperable digital platforms, and cross sector governance mechanisms to transform MCU from a standalone clinical service into a strategic gateway for relationship based and sustainable medical tourism development.

Conclusion

Based on the findings, it can be concluded that the competitiveness of medical check up services within the medical tourism framework is determined not primarily by clinical capacity, but by the ability of the health system to manage the patient journey in an integrated, digital, experience oriented manner supported by cross sector policy coordination. Malaysia, Thailand, and Singapore demonstrate complementary strengths through different models, with Malaysia relying on a well coordinated institutional ecosystem and national branding, Thailand integrating healthcare with hospitality and wellness tourism, and Singapore emphasising efficiency and interoperability of digital health systems that support precision and speed of service delivery. In contrast, Indonesia continues to face structural constraints including fragmented service pathways, weak patient navigation, limited cost transparency, underdeveloped integrated digital platforms, and the absence of a dedicated national medical tourism authority, resulting in MCU being positioned as a transactional service rather than part of a continuous care and tourism strategy. These findings confirm that the success of MCU as an entry point to medical tourism depends on benchmarking across service quality, operational efficiency, digital integration, tourism linkage, and policy coordination, which together shape patient experience, strengthen trust and loyalty, and ultimately enhance national competitiveness.

References

- Amalorpavanathan, J. (2024). Health for all: Medical tourism as a resource. *Journal of Medical Economics*, 05(4), 110–118.
- Asa, G. A., Fauk, N. K., McLean, C., & Ward, P. R. (2023). Medical tourism among Indonesians: A scoping review. *BMC Health Services Research*, 23, 49.
- Fetscherin, M., & Stephano, R. (2016). The medical tourism index: Scale development and validation. *Tourism Management*, 52, 539–556.
- Gholipour, H. F., et al. (2025). The economic contribution of medical tourism: Evidence from ASEAN countries. *Health Economics Review*, 15(1), 88–104.
- Mulyani, S., Daulay, M., Puspitasari, N., Amirah, S., & Jaya, N. (2023). Factors influencing Indonesian patients seeking medical treatment abroad: A qualitative study. *BMC Health Services Research*, 23(1), 1147.
- NAM Zain, N. A. M., Hanafiah, M. H., Asyraff, M. A., Ismail, H., & Zain, W. M. A. W. M. (2023). Exploring medical tourism competitiveness in Malaysia, Thailand, and Singapore. *Planning Malaysia Journal*, 21(30), 275–286.
- Rahmat, A., Handayani, P. W., Hidayanto, A. N., Pinem, A. A., Sandhyaduhita, P. I., & Kasiyah, K. (2021). Patient satisfaction towards healthcare quality at public hospitals in Indonesia. *Enfermería Clínica*, 31(Suppl 3), S330–S334.
- Thelen, S. T. (2023). The impact of country image and patient cosmopolitanism on patients' likelihood to travel abroad for surgery. *Journal of Travel & Tourism Marketing*, 40(3), 324–342.
- Wijayati, E. R., et al. (2025). Barriers to the development of medical tourism: A scoping review. *Health and Life Sciences*, 5(1), 15–29.