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## **Understanding critical success factors for implementing medical tourism in a multi-case analysis**

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**Peyman Akhavan**

Qom University of Technology, Qom, Iran

**Neda Azizi**

Torrens University, Melbourne, Australia

**Sahar Akhtari**

Iran University of Science and Technology, Tehran, Iran

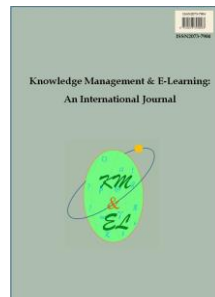
**Omid Haass**

RMIT University, Melbourne, Australia

**Tony Jan**

**Shelda Sajeew**

Torrens University, Melbourne, Australia



**Knowledge Management & E-Learning: An International Journal (KM&EL)**  
ISSN 2073-7904

**Recommended citation:**

Akhavan, P., Azizi, N., Akhtari, S., Haass, O., Jan, T., & Sajeew, S. (2023). Understanding critical success factors for implementing medical tourism in a multi-case analysis. *Knowledge Management & E-Learning*, 15(1), 43–63. <https://doi.org/10.34105/j.kmel.2023.15.003>

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## **Understanding critical success factors for implementing medical tourism in a multi-case analysis**

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**Peyman Akhavan\*** 

Faculty of Industrial Engineering  
Qom University of Technology, Qom, Iran  
E-mail: akhavan@qut.ac.ir

**Neda Azizi\*** 

Faculty of Business and Information Systems  
Torrens University, Melbourne, Australia  
E-mail: neda.azizi@torrens.edu.au

**Sahar Akhtari**

School of Business and Information Systems  
Iran University of Science and Technology, Tehran, Iran

**Omid Haass** 

Faculty of Property, Construction and Project Management  
RMIT University, Melbourne, Australia  
E-mail: omid.haass@rmit.edu.au

**Tony Jan** 

Faculty of Business and Information Systems  
Torrens University, Melbourne, Australia  
E-mail: tony.jan@torrens.edu.au

**Shelda Sajeev** 

Faculty of Business and Information Systems  
Torrens University, Melbourne, Australia  
E-mail: shelda.sajeev@Torrens.edu.au

\*Corresponding author

**Abstract:** Many researchers have analysed various aspects of the Medical Tourism (MT) phenomenon. However, most of them have considered only a specific country for their study. This study explores both the beneficial and adverse effects of medical tourism systematically. It also studies the critical success factors (CSF) for the MT using a multi-case study of dominant countries. A qualitative approach has been used in this survey study to generate a theoretical category. For that, the “Grounded Theory” research method has

been selected by which the collected data from real case studies (dominant countries in the MT industry) are categorized and analyzed through specific stages. The extracted elements can illustrate critical success factors of medical tourism and its effects on selected countries. The comprehensive results from the actual case studies were positive. The set of critical success factors can act as a list of items for countries and their health system to address when adopting MT. Two conceptual tables of the proposed critical success factors are in two categories: pull and push factors. This study is the first to yield an integrated perspective of effects on countries along with the classification of critical success factors into pull factors and push factors for implementing MT through a multi-case study that would be of practical value for many countries that have decided to gain benefit from the emerging niche market of MT.

**Keywords:** Medical tourism; Tourism industry; Qualitative method; Grounded theory; Case study

**Biographical notes:** Prof. Peyman Akhavan is a full professor at department of Industrial Engineering, Qom University of Technology, Qom, Iran. His research interests focus on Project management, Information systems, Knowledge management and System development.

Dr. Neda Azizi is a lecture at Torrens University, School of Business and Information Systems based in Melbourne, Australia. Her research interests broadly focus on the human, organizational and institutional aspects of systems development, Project, Knowledge and Risk management.

Sahar Akhtari is a lecturer at Iran University of Science and Technology, School of Business and Information Systems. Her research interests focus on Project management, Information systems, Knowledge management and System development.

Dr. Omid Haass is a Lecturer at the RMIT University, School of Property, Construction and Project Management based in Melbourne, Australia. His research interests are in Information system Development, Project, Knowledge and Risk management. Omid is a member of Project Management Institute (PMI) and have been certified as a Project Management Professional (PMP) by PMI since 2015.

Associate Prof. Tony Jan is an Associate Professor and Program Director of Information Technology at Torrens University Australia. Tony specializes in machine learning and cybersecurity with over 60 premier International Journal/Conference publications, 30 authored courses, and AU\$1.2M in homeland security research grants.

Dr. Shelda Sajeev is a senior lecturer (Master of Business Information Systems), Research Fellow, and Machine Learning Cluster Lead at Torrens University's Centre for Artificial Intelligence Research and Optimisation. She has 13+ years' experience in industry, teaching, and research with expertise in artificial intelligence, machine learning, medical image analysis, image processing, and data analytics.

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## **1. Introduction**

Traveling overseas for medical care has a historical stem, previously limited to elites from developing countries to developed ones, because of inadequate or unavailable health care services at home. However, medical travel (MT) is now changing its direction toward developing countries (Pocock & Phua, 2011). A recovery in comfortable resorts in the destination or host (developing) countries is a standard part of the MT experience: as part of tourist activities (Yu & Ko, 2012). The U.S.-based Medical Tourism Association (Lunt, 2011) states:

“People who live in one country travel to another country to receive medical, dental, and surgical care while at the same time receiving equal to or greater care than they would have in their own country, and are traveling for medical care because of affordability, better access to care or a higher level of quality of care.”

The care is not MT when one happens to have a health emergency while abroad. The intent key is that the patient must intend to go overseas for care (Yu & Ko 2012). Medical tourists cross international borders to obtain medical services and pay for this service out of their own pockets (NaRanong & NaRanong, 2011). MT is a subset of health tourism because MT, in addition to wellness tourism, ensue health tourism. Attracting tourists with the unique attractions of the destination combined with facilities for healthcare services is health tourism. There is also a significant synthesis between medical services and tourism. However, some researchers state that MT includes only medical services rather than tourism services (Lunt & Carrera, 2010; Yu & Ko, 2012). The MT Industry has grown globally. It includes nearly 50 countries across all continents, and several Asian countries are apparently in the lead. Thailand, Singapore, and India comprised approximately 90% of the MT market share in Asia in 2008 (NaRanong & NaRanong, 2011). Orthopedic, cardiac, and plastic surgeries are some procedures performed in MT hospitals (Crooks et al., 2013; Haass & Azizi, 2019).

Seeking benefits of this nature, OECD (Organisation for Economic Co-operation and Development) countries have been investing heavily in MT areas. Although, little academic research that exists primarily focuses on MT areas focusing on critical factors and contextual conditions (Thongmak, 2021). Hence, there is a need for further research on MT topics and the development of a comprehensive theoretical models based on its key factors. It is difficult to objectively describe the MT; while the lack of reliable data exacerbates this situation, it is conceptually full of nuances, contradictions, and contrasts (Yu & Ko, 2012). Many researchers have tried to analyze various aspects of the MT phenomenon to date. However, most of them have only considered a specific country in their study. This paper explores both the beneficial and adverse effects of the MT alongside the critical success factors (CSF) for successfully developing it using a multi-case study considering selected dominant countries. The findings of this paper would be of practical value for the many countries that have recently decided to benefit from the emerging MT. The structure of this paper is presented as follows: sections 1 and 2 define MT, followed by a literature review of its relative issues. The qualitative research methodology employed in the study is discussed in the following sections, and the data collected from nine selected countries are described. For the rest of the paper, we identify the critical success factors of MT in section 4 and its effects on selected countries by means of two suggested tables. Finally, section 5 presents how this study will assist countries and governments in creating strategies to thrive in the MT industry.

## **2. Literature review**

### *2.1. Definition of medical tourism*

Goodrich and Goodrich (1987) defined MT as “the attempt on the part of a tourist facility or destination to attract tourists by deliberately promoting its health-care services and facilities as critical factors, in addition to its regular tourist amenities” (p. 217), so emphasizing the critical factors. With socio-technical theory, Heung et al. (2010) defined MT as comprising three key factors: staying away from home, health as the primary motive, and occurring in a leisure setting. MT is thus a broad concept including both wellness tourism and medical tourism aspects (Faizi, 2022).

Frias-Navarro et al. (2020) noticed that MT can be defined as the procurement of cost-effective medical care to customers in corporation with the tourism industry. The process is often facilitated by the private medical sector, although both the private and public sectors might be involved in the tourism industry. With social theory, Connell (2011) defined MT as a form of popular great culture whereby people travel long distances to access medical services while being vacation in the more conventional sense (Petrucco & Ferranti, 2017; Ting, 2021).

Therefore, the development of MT within the tourism industry has led to the emergence of new markets, with different visions providing special treatments, such as dental services or surgeries. Tourist countries thus need an international medical tourism because of their high demand, high-end medical expertise and attractiveness as destinations (Heung et al., 2011).

### *2.2. Economic impact of medical tourism*

MT makes an important contribution to many of the world's economies. MT is one of the fastest-growing sectors within the health tourism field, and many countries are now serving it by making legal and practical arrangements (Heung et al., 2011). In the past, MT involved travelers from lower to higher-income countries seeking better medical facilities, But now the trend is reversed (Lautier, 2008; Smith et al., 2011). Many countries are now participating in MT as importers, exporters, or both. The leading importer - are North America and Western Europe. The leading exporters are located next to each other on all continents, like Latin America, Eastern Europe, Africa, and Asia (Smith et al., 2011). Nowadays, hospital marketing communications need to emphasize that the quality of care firmly matches Western standards. So the patients will travel even if similar high-quality health care is available in their home country (Veerasonorn & Beise-Zee, 2010). Charges for standard procedures in Thailand are cheaper than in the United States, such as heart bypass can be \$11,000 compared to \$130,000 in the US, respectively, likewise, Knee replacement can cost \$13,000 in Singapore compared to \$40,000 in the US (York, 2008).

Despite its noticeable and regulated significance, little is known about cross-border mobility even in Europe (Connell, 2011; Fauzi et al. 2018). The narrative review traverses the debate of medical tourist markets, consumer choices, outcomes, quality and safety, and ethical and legal dimensions, as in Lunt and Carrera (2010). The high costs of treatments mixed with long waiting times, affordable airfares to overseas destinations, favorable exchange rate changes, and general economic healthiness of the baby boomers contributed to MT as a distinct and new niche in the tourist industry (Connell, 2011). Successfully informing potential patients regarding procedure options, treatment

amenities, tourism chances, travel plans, and destination countries depends on MT practices (Mohamad et al., 2012). MT straddles the policy areas of trade and health. Increased international mobility of service providers and patients, advances in information and communication technologies, and an expanding private health sector are driving the rapid growth of trades in health services (Pocock & Phua, 2011). The variety in facilities and costs were more substantial factors than the facilities themselves (Abdullah et al. 2016; Yu & Ko, 2012).

The promotion of specialized MT practice is supported by the facilitators/brokers. They assist in some services such as travel bookings, picking hospitals and surgeons abroad, and helping with completing paperwork related to traveling. Since international regulation of the MT industry is limiting, patients rate and rank the quality and procedure outcomes using available information. Moreover, these patients may act as ‘ambassadors’ for the host countries and their hospitals in other countries (Crooks et al., 2010).

A correction in industry regulation is highly recommended so that the MT can provide a feasible means by which developing countries can gain access to the revenue and developed countries can ease the burden on their public health service systems (Mohamad et al., 2012).

In shaping the future of global medical care, MT will play a critical role as it sits at the growing intersections of technology, economy, and cultures. (Mohamad et al., 2012). MT is partly the result of the globalization of both the health care and tourism industries. Enhancements and expansion of information technology have changed the nature of cultural exchanges and communications among different countries. Similar culture, languages, and economic systems, shorter travel times, and engagement in trade relations are the advantages of selecting neighbouring countries for treatment (Smith et al., 2011). Medical MT tourism is seen as a gold mine by many developing countries. However, the growth of MT can have adverse effects on the general healthcare system of a destination country (Heung et al., 2011). The uncontrolled growth may place the physical and socio-psychological security and risk on the good health of the local population (Heung et al., 2011; Rowlands & Azizi, 2019). Well-known constraints on the growth of tourism in a particular region include restricted access to financial markets, limited belief on the part of international and domestic investors, complicated taxation necessities and procedures, limited budgetary allocation, a lack of integration, and limited tourism progress (Heung et al., 2011). The number of countries seeking to develop MT is rapidly growing as its success in Asia has aroused growing global interest and competition, and the optimism seems unbounded (Connell, 2011).

### **3. Research methodology and data collection**

The conceptual and perceptual analyses of MT and evaluation of supply and demand factors have emerged from tourism management (Connell, 2011; Pocock & Phua, 2011). The lack of qualitative studies of customers who seek personal services abroad is the main point preventing theory building, considering their emotional experiences before and after the service confrontations, and analyzing service providers’ relationships and their social environment (Veerasoontorn & Beise-Zee, 2010). This research will contribute to the theory building in MT and increase understanding of the key factors for customers from abroad. This research will also propose the effects on both importing and exporting countries involved in MT.

This section makes explicit the fundamental assumptions about the nature of organisational phenomena (ontology), the nature of knowledge about those phenomena (epistemology), and the nature of ways of studying phenomena (methodology). Like all fields of inquiry, organisational study is paradigmatically anchored. A paradigm is a general perspective or way of thinking that reflects fundamental beliefs and assumptions about the nature of organisations. An interpretive paradigm is based on the view that people socially and symbolically construct their own organisational realities. From this point on however, the study will be using the term 'qualitative research' for convenience to encompass research conducted in the interpretive paradigm, as opposed to the empirical-analytic paradigm employing mainly quantitative and experimental designs. A key feature distinguishing interpretive or qualitative from quantitative research is the way in which findings are described and the kinds of research questions that can be meaningfully answered.

One reason for doing qualitative research, according to Lincoln and Guba (1985), is that qualitative research methods offer an adaptable way of dealing with multiple realities, expose more directly the nature of the transaction between the researcher and the participant, and are more sensitive to the mutually shaping influences and value patterns that may emerge. Furthermore, the elegance of qualitative research is its texts.

Grounded Theorising (GT) is the linking of practice with theory through on-site investigation. GT is essentially an inductive method, observing aspects of social life as well as seeking patterns that can point to relatively universal principals (Charmaz, 2014). In essence, in sharp contrast to the deductive approach which begins with a general theory and derives a hypothesis for empirical testing, GT begins with observations and then proposes patterns, themes, or common categories. Thus, GT is an inductive approach that allows the researcher to develop a theoretical account of the general features of a topic while simultaneously grounding the account in empirical observations or data. Further, a major premise of GT is that to produce accurate and useful results the complexities of the organisational context must be incorporated into an understanding of the phenomenon, rather than be simplified or ignored.

According to Yin (2009), the case study is appropriate when a "how" or "why" research question is being asked about a contemporary set of events, over which the researcher has little or no control. In the same line of thought, the case method is well suited to capturing the subjective experiences of IT individuals and developing theoretical propositions from them (Yin, 2009). The data collected of the intervention have derived from different papers, journals, books, and also through the Internet browsing. This paper adopted a qualitative research design to facilitate the generation of theoretical categories that could not derive satisfactorily from the existing data. Especially because of the exploratory nature of this research and the researchers' interest in identifying the main subjects, events, activities, and influences that affect the performance of successful MT, the grounded theory (GT) style of data interpretation has been selected, which was blended with the case study design. This research paradigm, which is based on an in-depth qualitative study, has similarities to the forms of research that derive their theoretical vision from naturally occurring data. This highly iterative procedure involved moving between the cases, existing theory, and the raw data (Wagner et al. 1968). The data analysis of this research constituted four stages: accumulating diverse data, developing an in-depth case history of the country's activities from the raw data that provided the information, open coding and subsequent selective coding of the in-depth case history for the characteristics and the origin of the MT process in the country; and analyzing the patterns of relationships among the conceptual categories.

The researchers' interpretation and description of phenomena based on the actors' subjective descriptions and perception and judgment of their experiences in a setting generate the GT approach. This interpretation provides relevance based on context (Akhavan et al., 2006). After reviewing all data, some of them are selected. It is clear that currently, there are a lot of active countries in MT. Obviously, it is not possible to bring all of them into a comparative study, so we have selected nine successful countries for our study based on the published data and after consulting the experts in the field. These countries are the United States, Canada, Thailand, Singapore, Malaysia, India, South Korea, Tunisia, and Iran.

In the next step, we identify the success factors of the MT by categorizing the selected input data. Recognizing the relations between factors and selective coding is the next stage of this step. Comparing literature and the data with the results of each step is the major mechanism for finding new factors for our problem. This comparison should repeat until we reach no further improvement in the factors. This point is called 'saturation' in the grounded theory (step 4). The next paragraphs analyze the available information for each country that will help identify the potential factors that can be considered critical success factors.

United States (US): United States (US) reports a growing number of residents traveling overseas for medical care. The cause of the run to overseas medical process is that health care in the United States is in a crisis (York, 2008). The need for relatively common, elective medical procedures can make this type of medical care an acceptable alternative for price-sensitive patients (Alleman et al., 2011). In recent years, a growing number of cases has emerged with an alternative migration pattern, in particular, the emergence of the MT industry travel in which patients from high wage (high cost) countries such as the US to low wage (low cost) countries to seek care (Horowitz & Rosensweig, 2008). According to a study, the overall saving would be US\$1.4 billion annually if one in ten US patients suffering from 1 of 15 conditions went abroad for medical treatments (Smith et al., 2011).

Alleman et al. (2011) cited that the most common ways of obtaining proper treatments for a patient were through the Internet and word-of-mouth advertising. Following the result of the study respondents, while the most significant concerns are related to quality and coordination of follow-up care, the primary reason was lower cost. Several motivations for MT have been reported containing costs benefit with comparable quality, the availability of treatments that are not approved in the US, and evasion of lengthy treatment delays. To certify hospitals worldwide, some accreditation for providers and hospitals, often by the Joint Commission International (JCI) - previously the Joint Commission on Accreditation of Health Care Organizations - is required (York, 2008).

Canada: The individual choices of medical tourists could have significant consequences if their home healthcare facilities pay for treatments for postoperative complications. According to a consultation with patient health and safety experts in the Canadian province of British Columbia, Canadian patients engage in MT to seek medical care abroad to save costs on procedures, access care faster, and obtain procedures that are not commonly available or not available at all in Canada. One area of quality concern pertains to the capacity for informed decisions about hospital quality, surgical outcomes, and risks/complications (Azizi et al., 2019). Uninformed decision-making is a significant problem in MT. Patients returning from medical care abroad often bring back incomplete medical records or no documentation of their procedures. Both the lack of information flow and lack of follow-up care may pose costs for the domestic healthcare system.



Limited medical documentation provided to medical tourists could reflect a low standard of care abroad, masking shortcomings (Crooks et al., 2013). Although legal liability is often discussed in relation to risks inherent in MT, it received relatively little consideration by the participants. Although there was no health law representative, we expected a more explicit discussion of this issue, given the centrality of legal liability to debates around MT (Crooks et al., 2010; Crooks et al., 2013).

**Thailand:** MT in Thailand began After the Asian Financial Crisis of 1997, when private hospitals were required to generate revenue due to a reduction in the number of local patients (Connell, 2011). Since Thailand is one of the main destinations in MT, it has invested laboriously in health care infrastructures to confront the increased demand for accredited medical care through first-class facilities (NaRanong & NaRanong, 2011). The main reason for the success of MT in Thailand is the development of health tourism markets supported by its government and national tourism board utilizing and joining tourism and developing the industry with superior competitiveness (Kim et al., 2009). Hospitals in Thailand have acquired an international reputation and many foreign patients. This country has already hunted and obtained Joint Commission International (JCI) accreditation for five hospitals (Azizi et al. 2021; Smith et al., 2011). Bumrungrad international hospital in Bangkok was the pioneer in promoting its service to foreign patients and was also the first Asian hospital to be accredited by the JCI (Wongkit & McKercher, 2013). Thailand has accomplished so by inducing staff to be responsive to client demands, establishing beneficial relationships between doctors and patients. They also invested in medical equipment and techniques that were of the highest level of quality at the time (Heung et al., 2011). An inquiry by Wongkit and McKercher (2013) on pull motivational factors with regard to Thailand resulted as follows: Quality of care of medical service provider and its staff provider, qualification of physicians and doctors, the reputation of medical service provider, availability of required treatment, the reputation of Thailand as a hub by way of attractiveness, cost of treatment, availability of follow-up services, availability of healthcare professionals that are fluent in the patient language, recommendation from family and friends and others and time/to avoid long waiting periods at home (Davison et al. 2022; Wongkit & McKercher, 2013). These motivational factors affected the situation in Thailand; as Heung et al. (2011) pointed out, Thailand quickly became a hub for cosmetic surgery. Although medical tourists are still a small fraction of the 1.5 million foreigners who receive medical care in Thailand, they are the tourist group most likely to affect the country in a major dimension (NaRanong & NaRanong, 2011).

In Thailand, MT has both positive and negative effects. MT generates a value-added approximately equal to 0.4% of the GDP of the Thai economy. It helps increase income for the medical services sector, the tourist sector and all related businesses, and it generates other intangible benefits. The negative effects for Thai society stem from having to provide health care services for thousands of medical tourists annually with the same number of health care staff. Although higher prices for healthcare services potentially generate more revenue for the country, hospitals for the MT have lured many highly skilled physicians and specialists out of public and teaching hospitals. Henceforth, the majority of Thais will probably receive poor health care services. Most physicians demanded by foreigners are specialists who have trained and practiced for at least ten years. Therefore a substantial increase in physicians' salaries in all community hospitals resulted. The shortage of physicians and increased medical fees for self-paying Thais are negative effects.

**Singapore:** The Singapore Tourism Board (STB) has been supporting the products such as health travel packages linking medical services and travel options (Kim et al.,

2009). Singapore Medicine was launched in 2003 to strengthen Singapore's position as a leading destination not only for business and rest time but also for world-class, affordable, and safe health care. Advanced treatments like cardiovascular, neurological surgery and stem cell therapy are at the high end of the market that attracts patients (Pocock & Phua, 2011). Singapore's global reputation as an MT centre has been validated by the report of the World Health Organization (Reinhardt & Cheng, 2000), which ranked them 6th in the world and the best in Asia in 1997. Most of the private hospitals in Singapore are participating in the MT program. Some of these hospitals have also received international health accreditation from the JCI (Lee, 2010).

The relation between health care and international tourism, accidents, injuries, and health-related issues either personally experienced or publicized by the press can adversely affect the experience or perception of tourists (Lee, 2010). Health care is one of the key destination attributes of tourists' choice, and tourism is one of the main growth factors of Singapore's economy (Lee, 2010). These have yielded an increase in the tourism revenue in Singapore (Hwang & Xie, 2018). The extent to which formerly reputed to be the leading Asian medical tourist destination and the "medical hub of Asia" (NaRanong & NaRanong, 2011). That may be because of the geographical situation between Japan and the Middle East as a tourist spot.

Malaysia: A few months after the start of the Asian Financial Crisis, MT was proposed by the Malaysian National Economic Action Council as an approach to support economic recovery and sustainable growth. Within the framework of a discursively unavoidable process of economic globalization, healthcare is becoming less edified as a public good and more as a tradable commodity (e.g., Trade-Related Aspects of Intellectual Property Rights (TRIPS) and the General Agreement on Trade and Tariffs (GATS)) and through the transnational agencies and companies (Ormond 2011). MT is the second-largest income earner for Malaysia (Lee, 2010).

As Ormond (2011) cited, visualizing a global healthcare marketplace shaped along with US terms and standards. Malaysia presents a lot to offer with highly trained and experienced doctors, surgeons, and paramedics, the latest healthcare facilities and medical procedures, five-star hotel accommodation, affordable apartments, and a warm tropical paradise for postoperative recuperation.

In Malaysia, health care delivery is increasingly becoming unfair (Connell, 2011). Much critique centers upon the redistribution of scant national medical (human and material) resources to the privileged wealthier (foreign) patients over their own poorer citizens (unequal access to biotechnology and questions of bioavailability). The investment in technology-intensive tertiary care to attract medical tourists resulted in an internal brain drain, the diversion of state funds and resources from already strained public health systems. There are significant imbalances in specialized care in the private sector (Ormond, 2011). Nevertheless, today, Malaysia's health care system would be best described as a 'mixed public-private system.' The majority of initial care provided by the private and the public sector follows tertiary care (Chee, 2008).

Malaysians' rising domestic income and education levels are factors to increase consumer awareness of healthcare services. MT gets tied to the belief in the pervasive empowerment and development slogans that push for Malaysia to become a developed country. If health care quality attracts foreign exchange with the linkages to internationally renowned medical institutions, some expatriate Malaysian doctors return home. They participate in this simultaneously home-grown and adequately international care. Foreign and Malaysia-based medical travel facilitators and individual doctors themselves increasingly use the delocalized space of the Internet for advertising their

qualifications to foreign patients. While the promotion of individual medical practitioners to a Malaysian audience is prohibited, many people thought Malaysia did not have the expertise and facilities (Ormond, 2011).

India: Indian government organized a medical tourism promotion team in charge of tourism, transportation, and visa processing for foreign patients (Hwang & Xie, 2018). For private fund patients, cost savings are crucial in encouraging people to travel long distances searching for affordable care. Patients with access to medical care in their home systems are thought to seek care abroad in order to avoid long wait times or access procedures that are unavailable or illegal at home (Crooks et al., 2013). The long waiting lists were the main reason patients travel to India for medical treatment. Current data indicated that India has the highest number of medical travel facilitators or agencies assisting medical tourist trips (Mohamad et al., 2012). Medical tourists also visit India for such alternative treatments as ayurvedic medicine and yoga (Heung et al., 2011). They can obtain timely, affordable, and competent treatment in India. Meanwhile, critics observe that costs are kept low because doctors and surgeons in destination countries often pay limited malpractice insurance, thus potentially putting patients at risk while simultaneously depressing prices (Crooks et al., 2013; (Crooks et al., 2013; Gan & Frederick, 2011). The expansion of the industry in India and other Asian nations is a key part of national economic development and health sector planning, which could have seemed to affect revenue. National governments in these countries actively promote their nations as destinations for foreign patients (Crooks et al., 2013). The first trade show promoting MT contributes to building a larger understanding of how the MT industry operates and, in doing so, provides useful insights for social and health science researchers interested in examining this specific global health service practice (Crooks et al., 2013). India has already sought and obtained JCI accreditation for 16 hospitals (Smith et al., 2011). Some materials promoting MT assure friends and family that going abroad for care is safe and sound. According to a survey by Crooks et al. (2013), some components like quality and accreditation of services, modern technology & safety equipment, cost, English speaking & foreign training, follow-up care, friendly doctors who offer some attractiveness to health and treatment process are examples of promotional material for MT.

South Korea: MT is now marketed as a niche product that encompasses both medical services and tourism packages (Connell, 2011). Korea is emerging as a new medical-tourist destination but ranks seventh among nine major Asian destinations. Despite Korea's global medical standards and the high technical proficiency of Korean doctors in medical services, inconveniences related to medical and care services, stay and cost, and information and insurance elements were most strongly associated with Japanese tourists. This may reflect a possible tendency of Japanese tourists to value safety and cost-effectiveness (Yu & Ko, 2012; Siddique et al. 2022).

According to a survey of MT American patients, many respondents used the Internet to gather information about MT and rated the quality of medical services at the hospital as excellent. Most of the respondents participated in tourism experiences, such as sightseeing, shopping, eating, and enjoying the local culture. Also, language barriers, or communication problems, were not encountered. Approximately all of the respondents said they would travel again overseas for medical care, and they would recommend others to travel overseas. The results of this survey show that hospital accreditation played a role in their choice when travelling internationally. With the samples from Chinese, Japanese and American patients who had experienced MT in Korea, in terms of medical services, the patients considered the skills of medical staff the most important factor, which was followed by the reliability of medical centers, and medical facilities

and equipment. In terms of other factors, patients considered staff-patient-manner first, followed by cost, ease of access, the convenience of communication, aftercare service, tourism products packaged, and insurance assistance. Also, South Korea may be a comfortable destination because of the cultural similarities and proximity of the Chinese and Japanese (Lee, 2010). Emphasizing the high quality and cost-effectiveness of medical technology in Korea and the strict safety standards and aftercare service would play a significant role in future efforts to market MT (Yu & Ko, 2012). The Republic of Korea (ROK) is commencing a new project to establish the ROK as a hub for MT in Asia. The ROK's national government has actively promoted a plan to link the medical industry with tourism (Khalfan et al. 2022; Hwang & Xie, 2018).

Tunisia: Because of the high quality of its health sector and its proximity to Europe, Tunisia has the highest export potential for health services in the Middle East and North Africa (MENA) Region. Revenues from “health-related travel” amounted to 22 million \$ in 2003. As in many other countries, health services exports is a new phenomenon in Tunisia. The MT is seen as an opportunity for economic growth (Lautier, 2008). Following the signing of the GATS agreement on trade in services, more attention has been given to health trade and “MT” issues as health costs increase in the North. It has created a booming new niche in the global services market based on providing world-class treatments at low prices, combined with attractive resorts for convalescence. Such service promises to be a niche that could offer developing countries export and employment opportunities with high value-added services (Azizi et al. 2022; Hallem & Barth, 2011). Interviews with officials at the Ministry of Health and health professionals point out that foreigners are systematically treated in private clinics, except in a few cases. A study about MT in Tunisia has stated that the activity of MT profoundly relies on the Internet. The role of the Internet here is revealed that the patients only see their physician once they are in Tunisia. Health services exports may represent a quarter of Tunisia's private health sector output and generate jobs for 5000 employees in the health and tourism sectors. Because of the high level of qualification in the workforce, labour productivity is relatively high in the health sector. The two main potential problems are the risk of internal brain drain of medical personnel and diminished availability of health services for the poor. This high concentration confirms the dual structure of the health services suppliers in Tunisia in terms of exports. The growth of exports may reduce the incentives to migrate abroad because health professionals benefit from better working conditions and more attractive career opportunities (Lautier, 2008; Özkan et al. 2021).

The cost advantage of Tunisian providers ranges from 30 to 50%, which - according to interviews- could allow them to attract a share of the European demand. The problem of follow-up and aftercare increased the cost (and the risk) of this kind of international transaction (Lautier, 2008) considerably. Because of the information asymmetry, the relationship between the patient and the health provider is based on unequal medical knowledge (Haass & Azizi, 2020).

Iran: Because of its location in the Middle East, surrounded by Muslim countries, tourists from these countries seldom (only 6%) encounter problems during their applications for a visa (Moghimehfar & Nasr-Esfahani, 2011). Indeed the distance between the patients' country of origin (home) and their medical destination affects their transportation cost and convenience. The result of a study done by Moghimehfar and Nasr-Esfahani (2011) on non-fertile couples traveling to Iran illustrates that cost and treatment, along with legal and moral restrictions and religious considerations, are critical factors that lead patients to seek reproductive treatment overseas. Since ART (Assisted Reproductive Technology) in many countries worldwide is illegal, patients select Iran for these treatments. The existence of more than 70 clinics and specialized medical centers in

Iran has prompted the offering of infertility treatment to both Iranian and non-Iranian couples. Many natural tourist attractions, historical and archeological sites with more than 7000 years of urban settlements are located in Iran. Based on the mentioned study made by Moghimehfar and Nasr-Esfahani (2011) except moral and legal, and religiously correct fashion (such as Fertility through ART in a religious method), the following factors are vital elements for foreign patients' decision making: Low price of treatment, a tourist attraction in the destination country, and lack of expertise in the origin country. Also, Iran is cost-competitive compared to Jordan, Turkey, UAE, Saudi Arabia, and Bahrain, which are its regional competitors, and Southeast Asian countries such as Thailand, Singapore, Malaysia, Philippines, and India. The use of modern medical technology, especially high-tech medical equipment, is centered mainly in big cities and private hospitals (Azizi et al. 2021; Jabbari et al., 2012). For those who travel to other countries for medical services, international standards are of great importance because they can be considered a criterion to indicate the quality of a hospital. ACI and JCI are the only two famous organizations that observe the accreditation standards. Accreditation Canada International (ACI) is a not-for-profit, autonomous organization whose objective is to provide consultant services in health care. So far, only two hospitals in the world have received a platinum certificate in their first attempt. "Razavi Hospital" of Mashhad in Iran is the second hospital in the world that got the platinum certificate due to the quality of medical services in its all specialty areas at the first time of evaluation. This is the first platinum certificate of a global accrediting organization in the middle-east region. Through this assessment, all the internal affairs of the hospital and also the related issues including equipment, environment, observing beneficiaries' rights, observing patient's rights, observing patient's safety in the fields of medicine, health, nursing, nutrition, and the use and application of human, physical, cultural issues and financial resources are evaluated.

#### **4. Findings**

According to Crooks et al. (2010), push factors (i.e., things that drove patients away from care at home) were cost and wait time. The pull factors (i.e., things that drew patients to other countries) include quality, language, religious accessibility, political climate, and culture. Many other studies have analysed the factors and dimensions that influence MT industry (Heung et al., 2011). MT breeds a range of ethical concerns, counting its effects on destination countries (e.g., exacerbating health inequities) and on source countries (e.g., creation or entrenchment of two-tier medical systems). The results from the actual case studies are two conceptual tables of the proposed critical success factors for pull factors and push factors. The extracted factors are explained more (see Table 1).

##### *4.1. Pull factors*

**Promotion:** Marketing may be more effective in the source market or the destination market. Promotion may represent the most cost-effective way to reach the market (Wongkit & McKercher, 2013). This factor includes advertising, internet programs, and word of mouth (Tourists become ambassadors).

**Follow-up care:** There are concerns about the lack of follow-up care in the home country. Complications may arise after surgery, and if they arise once the patient has returned home, it will be the home health system that has to cope with them. However, in a bi-lateral system, follow-up care could be pre-arranged, with physicians in both home

and host countries sharing medical records and communicating before and during the procedure, contributing to a better quality of care (Smith et al., 2011).

**Quality of care:** The quality of care in the host country is a matter of concern, so the host countries have sought national and international accreditation. For instance, 35 countries have sought accreditation from the JCI. Accreditation bodies ensure that hospitals provide services that comply with national or international standards, and the care offered by these hospitals is comparable to that provided by patients' home facilities (Smith et al., 2011).

**Cost:** The treatment costs for medical tourists are often a quarter of the price at home (Heung et al., 2011).

**Language:** MT destinations need to hire medical staff who can speak foreign languages (Heung et al., 2011).

**Similar culture:** Geography and culture influence mobility, lack of cultural similarity limits willingness to travel (Connell, 2011).

**Legal and Ethical liability and religious beliefs:** traditional bioethics has emphasized the value of autonomy above other ethical values (Snyder et al., 2011). Choosing an overseas treatment centre brings a number of challenges – differences in legal liability and how to pursue complaints and receive redress. Ethical and legal issues arise for all surgical treatments – informed consent, liability, and ensuring remedies for surgical malpractice form more fundamental questions (Lunt & Carrera, 2010).

**Time (Treatment time and travel time):** The distance between home and host country influences both comfortableness and cost (Connell, 2011). So besides the timely treatment, travel time is important too.

**Bilateral relation (trade & communication):** The relationship between countries is a highly effective reason for selection bias. For example, some agreements between the home and host countries and positive relations, including trade and communication, may be a pull factor.

**Tourist attraction:** MT is a popular cultural phenomenon when people make a long journey in order to obtain medical, dental and surgical services while vacationing (Mohamad et al., 2012).

**Attractiveness and Hospitality:** To retain patients, a country needs to create positive emotional experiences for patients, which create a desire to come back (Veerasoontorn & Beise-Zee, 2010). For instance, a medical hub country or possessing friendly doctors in its health centres could improve the attractiveness of that country.

#### *4.2. Push factors*

Three push factors are considered below.

- **Wait for the national system:** Long waiting lists may foreclose the possibility of timely treatment of patients and thus lead to medical trips.
- **Not available treatment:** undermining health equity for different classes of people and lack of qualified health standards in the home country is a driving factors for patients switching to MT.

- Lack of quality service: Sometimes, this absence raises a negative experience in the home country (Veerasoontorn & Beise-Zee, 2010), and lead to a scouting trip to MT.

**Table 1**  
Suggested table for critical success factors of medical tourism

	US	Canada	Thailand	Singapore	Malaysia	India	Korea	Tunisia	Iran
Pull Factors						✓	✓	✓	
Promotion	✓	✓	✓	✓	✓	✓	✓		
Follow-up care	✓	✓	✓		✓	✓	✓	✓	✓
Quality of care	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cost	✓	✓	✓	✓		✓	✓		
Language			✓			✓	✓		
Similar culture							✓		
Legal, ethical liability& religious beliefs		✓					✓	✓	✓
Time	✓		✓						
Bilateral relation					✓		✓	✓	
Attractiveness & hospitality			✓			✓			
Tourist attraction			✓				✓		✓
Push Factors									
Wait for national system	✓	✓	✓			✓			
Not available treatment	✓		✓			✓	✓		✓
Lack of quality service	✓					✓	✓	✓	✓

#### 4.3. Positive effects

Like each kind of tourism, MT has a number of effects on both the home and host countries involved in MT. Some positive effects extracted from the result of our survey for two concerned places within the MT process, including:

##### 1. Host country

- Increasing revenue: investing in the medical industry sector increases income for the country (Mohamad et al., 2012). In this paper, economic development is considered an element that could have had a positive impact on revenue for host countries.
- Foreign exchange: Revenues from health services exports could generate foreign exchange earnings and resources for investment and growth in developing countries. It can also create incentives to upgrade health care standards in the country to attract foreign patients (Lautier, 2008).
- Upgrade health standards: As hospitals in the host country continue to develop this lucrative market, they will strive to meet the expectations and demands for the quality of care found in home hospitals (York, 2008).

- Reversing brain drain: However, the movement of health care professionals from developing countries to developed countries is driven by wage differentials (Lautier, 2008). Since hospitals catering to medical tourists offer competitive salaries and work opportunities, some exporter countries have taken advantage to attract home health workers back home, reversing the brain drain (Smith et al., 2011).
- Competition and niche marketing: Service quality is at the heart of a country's competitiveness in the international market (Veerasoontorn & Beise-Zee, 2010).
- Boosting tourism industry.

## 2. Home country

- Reduced wait list.
- Saving money: When a number of patients go abroad for treatment, some savings in turn list, treatment, surgery, and staff salary be generated for the home country.
- Higher level of care: Communicating and linking with the health system in other countries, treating patients in hospitals and by physicians of those countries, restoring medical records to their country, and the relationship between doctors from two countries can make the quality of health care services to increase.
- Increase patient choice: Proximity is an important but not a decisive factor in shaping choices, given peoples' ability and willingness to travel long distances. There is a need for a greater understanding of how trade-offs are made and how these differ for different treatments and consumer groups (Lunt & Carrera, 2010).

## 4.4. Negative effects

In proportion to positive effects, MT also has negative effects on countries. Based on our available data, the following features negatively affect both home and host countries.

### 1. Host country

- The dual structure of health system: A negative outcome of the outbreak of MT is a possibility of a two-tiered health system, in which foreign patients benefit from sophisticated private hospitals with a high staff-to-patient ratio and expensive, state-of-the-art medical equipment, whereas the local population would only have access to basic, under-sourced health facilities (Smith et al., 2011).
- Strength of private sector: MT occurs in the private sector. In Malaysia and Singapore, it's emphasized on the strength of the private sector (Pocock & Phua, 2011); however, in countries like India and Thailand, the state also plays a role by investing directly or indirectly in private hospitals (Smith et al., 2011). Medical personnel may be tempted to leave the public sector for the highly paid sectors serving foreign patients (Gan & Frederick, 2011).
- Internal brain drains: With the increasing progress of MT in the private sector, personnel of health services is likely absorbed from the public to the private sector, which leads to an internal brain drain and aggravates the shortage of health personnel within the country (Lautier, 2008).



## 2. Home country

- **Malpractice low:** Another concern highlighted in the literature is the lack of or difference in malpractice laws in exporting countries. Regardless of the quality of the care, professional errors are likely to occur eventually and may be limited recourse for compensation. Countries like India and Thailand, which are among the leading exporters of health services, have limited malpractice laws (Smith et al., 2011).
- **Lack of follow-up care:** Patients may be at risk upon return due to a lack of aftercare planning or that aftercare may be challenging due to informational discontinuity (Crooks et al., 2010).
- **Lack of information flow:** Incomplete medical records or no documentation of the care when patients come back from abroad often bring some difficulties. Both the lack of information flow and lack of follow-up care may pose costs for the domestic healthcare system (Crooks et al., 2013). The aspects that are the bases of our second framework are shown in Table 2.

**Table 2**  
Suggested table for effects of MT

	US	Canada	Thailand	Singapore	Malaysia	India	Korea	Tunisia	Iran
Positive Effects						✓		✓	✓
Increasing in revenue			✓	✓	✓			✓	
Foreign exchange					✓			✓	
Upgrade health standards			✓	✓				✓	
Reversing brain drain			✓		✓			✓	
Competition and niche marketing			✓				✓	✓	
Boosting tourism industry				✓	✓				
Reduce wait list									
Saving money									
Higher level of care			✓						
Increase patient choices	✓				✓				
Negative Effects									
Dual structure of health system			✓		✓			✓	
Increase the strength of private sector				✓	✓			✓	
Internal brain drain			✓		✓			✓	
Malpractice low						✓			
Lack of follow-up care		✓						✓	
Lack of information flow		✓						✓	

## **5. Theoretical and practical implications and directions for further research**

MT is becoming a vital area in the tourism industry thus organizations cannot afford to neglect. Considering that this industry combines the medical and tourism sectors and has tremendous economic and social effects, especially in developing countries, research in this area will be of interest to researchers and practitioners.

Despite its importance, MT represents a new research area, and few researcher have discussed the nature of the tourism industry. Potential areas for future MT research that would benefit from tourism industry include the following:

- The demand for MT can be analysed using quantitative methods to identify the critical factors that affect MT implementations.
- A mix method including qualitative and quantitative methods could be carried out to reveal the current situation in a given region or country.
- A longitudinal study of a given MT can allow in-depth analysis of the concept over a long period of time.

Analysing MT from social and management perspectives is beneficial to the tourism industry, as it allows the entire picture of the industry to be depicted and reveals its strengths and weaknesses. Analysis of the MT area highlights the key points of what factors expect to find in a destination and how to attract them. The information gleaned from such research also has implications for the quality of MT topics in a single institution and for the industry at large. Studies of the factors provide valuable information on MT institutions in terms of promotional activities and infrastructure and superstructure development. Analysing and comparing the critical factors in a given country, as well as their interactions with the decisions made by managers, will undoubtedly reveal the managerial and processual perspectives taken by all of the market players in the MT industry.

## **6. Conclusion**

This paper presents an integrated perspective of beneficial and adverse effects on countries, classifying critical success factors into pull factors and push factors for implementing MT through the GT approach in a multi-case study. Available data from nine dominant countries are considered, including the United States, Canada, Thailand, Singapore, Malaysia, India, South Korea, Tunisia, and Iran. After the necessary study, the main factors were recognized and classified into two categories.

The first table contains the pull factors and the push factors. Pull factors that are from destination countries persuade patients to choose them for treatment and wellness purposes. The factors include promotion, follow-up care, quality of care, cost, language, similar culture, legal, ethical liability & religious beliefs, time, bilateral relation, attractiveness & hospitality, and tourist attraction. While the push factors included waiting for a national system, not available treatment, and lack of quality service.

The second table shows different effects of MT within selected countries. The positive or beneficial and adverse effects affect the home and host countries in MT. Positive effects include increases in revenue, foreign exchange, upgraded health standards, reversing brain drain, competition, niche marketing, boosting the tourism industry for host countries and reducing waitlist, saving money, higher level of care, and

increasing patient choices for home countries. Negative effects include the Dual structure of the health system, an increase in the strength of the private sector, an internal brain drain for host countries and versus malpractice law, lack of follow-up care in the home country, and lack of information flow for home countries.

Further studies could be conducted to gather data from a particular country and check the factors and effects for that specific country to determine the basic needs for the success of MT. Researchers could use surveys to conduct the research findings in a specific field and prioritize the extracted factor in hospitals and healthcare clinics. Also, a comparative study between North and South countries may be a good option. Furthermore, cultural and ethical issues, especially in promoting MT, could be interesting for future research.

### Author Statement

The authors declare that there is no conflict of interest.

### ORCID

Peyman Akhavan  <https://orcid.org/0000-0001-6256-3288>

Neda Azizi  <https://orcid.org/0000-0001-5651-4869>

Omid Haass  <https://orcid.org/0000-0002-1561-4561>

Tony Jan  <https://orcid.org/0000-0002-3114-8978>

Shelda Sajeev  <https://orcid.org/0000-0002-7428-4435>

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