

Medical Travel and Regional Development: Assessing Healthcare Globalization in Eastern India

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Abstract -- Healthcare globalization has accelerated the cross-border movement of patients, professionals, technologies, and capital, leading to the rapid expansion of medical travel as a global service-export sector. While India has established itself as a major medical tourism destination, existing research disproportionately focuses on Southern and Western hubs such as Chennai, Mumbai, and Delhi. Limited attention has been given to Eastern India, despite significant increases in international and domestic patient flows into West Bengal. This study examines the emergence of Eastern India particularly Kolkata as a growing node in global medical travel and investigates how this trend contributes to regional development. Drawing on qualitative insights from semi-structured interviews with hospital administrators, clinicians, and international patient coordinators, supported by secondary data from policy reports and academic literature, the study evaluates institutional capacity, economic linkages, and marketing strategies that shape the region's medical travel ecosystem. Findings indicate that affordability, specialized care, and geographical proximity drive cross-border patient mobility, while spillover effects stimulate growth in hospitality, transportation, diagnostics, and wellness sectors. However, the sector faces challenges including ethical concerns, regulatory gaps, and limited post-treatment coordination. The paper concludes that with strategic policy support, infrastructure enhancement, and robust governance, Eastern India can strengthen its position in the global medical travel landscape and leverage healthcare globalization for inclusive regional development.

I. INTRODUCTION

Healthcare globalization defined as the transnational flow of patients, medical professionals, technologies, and healthcare capital has become one of the most dynamic forces reshaping global health systems in the twenty-first century. Among its various manifestations, medical travel has emerged as a particularly transformative phenomenon, enabling individuals to seek timely, affordable, and high-quality medical care beyond their national borders. The rise of medical travel is associated with disparities in treatment costs, long waiting periods in public health systems, rising demand for advanced therapeutic interventions, and the increasing commodification of healthcare services (Shenkar, Liang, & Shenkar, 2021).

As a result, both advanced economies and developing nations have witnessed a steady increase in the number of patients pursuing treatment abroad, thereby integrating national healthcare systems into global service markets.

India has become a major global hub for medical tourism due to its combination of affordability, availability of specialized tertiary care, English-speaking professionals, and internationally accredited hospitals. Earlier scholarship highlights the dominance of established medical hubs such as Chennai, Delhi, and Mumbai regions that benefit from large scale private healthcare investments, superior international connectivity, and early integration into global health markets (Medhekar & Wong, 2020; Malhotra & Dave, 2022). However, this geographic concentration of research and policy attention has resulted in an underrepresentation of other emerging medical destinations within India.

In recent years, Eastern India, particularly the state of West Bengal and its capital Kolkata, has gained prominence as a significant regional medical travel destination. Situated strategically near Bangladesh, Nepal, and Bhutan, West Bengal attracts substantial cross-border patient flows due to its geographical proximity, shared cultural-linguistic ties, competitive medical pricing, and expanding healthcare infrastructure (Biswas & Rai, 2023; 2024). Kolkata now functions as a major referral centre for patients from North-East India and neighbouring countries, supported by multi-specialty hospitals such as Apollo Gleneagles, AMRI, and Narayana Health. These institutions have expanded their international patient services, introduced telemedicine consultations, and developed global outreach programmes tailored to specific regions. Despite this growth, academic attention to Eastern India's role in healthcare globalization remains limited.

Existing literature on India's medical tourism sector often overlooks the unique developmental implications for Eastern India. While studies identify the economic potential of medical tourism especially through employment generation, hospitality sector expansion, and foreign exchange earnings—few examine how these benefits materialize within less-studied regional contexts.

Rai's (2019) seminal work on Kolkata provides early insights into the city's expanding medical economy, but comprehensive evaluations of institutional capacity, market integration, and regional spillovers remain sparse. Moreover, the national "Heal in India" initiative emphasizes the strategic importance of developing new medical travel destinations, suggesting a policy-level recognition of the need to diversify India's medical tourism landscape beyond traditional centres.

Against this backdrop, this study investigates how medical travel contributes to regional development in Eastern India, situating the analysis within broader debates on healthcare globalization. The research examines institutional readiness, the economic and infrastructural spillovers generated by medical travel, and the emerging competitive advantages of West Bengal relative to other Indian regions. By analysing both primary qualitative insights from hospital administrators and secondary data from policy reports and scholarly studies, the paper offers a multi-layered understanding of how global health mobility is reshaping regional economies.

The significance of this inquiry is threefold. First, it addresses a clear research gap, as the developmental implications of medical travel in Eastern India remain largely unexplored in the literature. Second, it offers timely insights for policymakers in West Bengal seeking to align regional health-sector strategies with national initiatives such as "Heal in India" and "AYUSH" integration programmes. Third, it contributes to theoretical discussions on healthcare globalization by demonstrating how emerging medical hubs in developing-country contexts can participate in and shape global flows of health services.

The study is guided by the following research questions:

1. What institutional and infrastructural factors are driving the growth of medical travel in Eastern India?
2. How does medical travel contribute to regional economic development in West Bengal?
3. What challenges and governance issues may hinder the sustainable expansion of medical tourism in the region?

Overall, this introduction positions Eastern India as an underexplored yet increasingly significant component of India's medical travel ecosystem.

II. LITERATURE REVIEW

2.1 Drivers of Medical Tourism

The global escalation of medical tourism is driven primarily by disparities in healthcare costs, technological availability, and waiting times between countries.

Cost remains the most dominant factor, with procedures in developing destinations priced significantly lower than in high-income nations. For instance, cardiac surgeries exceeding USD \$150,000 in the United States can be accessed in India for about USD \$10,000, while hip replacements costing roughly USD \$50,000 in Western countries are available for approximately USD \$7,000 in India (Bhatia & Birchley, 2020; Jani et al., 2023). Such price differentials have reshaped patient decision-making and positioned India, Thailand, and Malaysia as cost-effective global alternatives.

Beyond affordability, advancements in medical technology and the rise of internationally accredited hospitals have strengthened India's competitive edge. Procedures involving robotic surgery, minimally invasive techniques, and advanced diagnostics have become commonplace in major Indian hospitals, many of which hold National Accreditation Board for Hospitals (NABH) or Joint Commission International (JCI) certification. Yilmaz and Aktas (2021) note that such accreditation systems enhance trust and align local healthcare practices with international clinical standards.

Long waiting periods in public healthcare systems of developed nations further motivate outbound patient mobility. For example, non-urgent orthopedic procedures in Canada often require an average waiting period of 42.4 weeks, prompting patients to seek faster treatment abroad (Yilmaz & Aktas, 2021). The confluence of these drivers—cost savings, technological advancement, high-quality care, and reduced waiting time—explains the rising global share of patients travelling for cardiology, orthopaedics, oncology, and fertility services.

2.2 Medical Tourism and Regional Development

Medical tourism has been shown to generate substantial regional development impacts, particularly in emerging economies where private healthcare investments are rapidly expanding. Prior studies underline that cities such as Chennai, Mumbai, and Delhi have become medical clusters, attracting international patients and stimulating growth in auxiliary sectors including hospitality, transport, and wellness services (Collins, Medhekar, & Şanal, 2022). These clusters thrive on advanced healthcare infrastructure, skilled professionals, and coordinated marketing strategies targeting global markets.

The developmental effects of medical tourism extend beyond direct medical services. Aich and Banerjee (2023) estimate that every 100 international patients create up to 80 ancillary jobs, ranging from translators and patient coordinators to hospitality staff and travel facilitators.

Multiplier effects are particularly significant in urban regions where tourism, retail, and transportation ecosystems can absorb increased demand. Infrastructure investments—such as improved roads, diagnostic centres, and communication networks—often benefit local communities alongside international patients.

In Kolkata, similar pathways of regional development are emerging. Hospitals such as AMRI, Apollo Gleneagles, and Narayana Health have spurred urban economic activity, creating employment opportunities and encouraging local entrepreneurship in health travel coordination, wellness services, and diagnostic partnerships (Collins et al., 2022). The state's geographical proximity to Bangladesh, Bhutan, and Nepal further reinforces the spillover benefits due to stable and consistent cross-border patient inflows.

2.3 Medical Tourism in India: National Overview

India has rapidly ascended as a global medical tourism powerhouse, with the sector projected to reach USD 13 billion by 2026 (Dahal, 2022). The country's competitiveness rests on a combination of structural and cultural advantages. First, India provides a rare integration of low treatment costs with high-quality medical services delivered by internationally trained physicians. Second, the predominance of English-speaking healthcare professionals and specialized tertiary-care hospitals strengthens patient confidence, especially for Western travellers.

Government policies have played a significant role in shaping the country's medical tourism ecosystem. Initiatives such as "Heal in India" and AYUSH promote both modern and traditional systems of medicine, integrating Ayurveda, Yoga, Unani, Siddha, and Homeopathy into comprehensive wellness packages (Malhotra & Dave, 2022). Medical visas, streamlined immigration protocols, and government incentives for hospital infrastructure have further facilitated growth. Dahal (2022) highlights that India's healthcare tourism model uniquely blends technological modernity with traditional wellness systems, catering to both clinical and holistic health-seeking travellers.

Contemporary research also emphasizes India's growing visibility in international markets and the importance of public-private partnerships in sustaining this growth (Mishra & Sharma, 2021). Yet, while Southern and Western cities dominate national statistics, emerging hubs such as Kolkata and Guwahati represent the future diversification of India's global health footprint.

2.4 Research on Eastern India: Emerging Evidence

Compared with Southern and Western India, Eastern India's medical tourism ecosystem remains comparatively under-studied, despite notable growth in recent years.

Empirical research reveals a surge in healthcare investments, with Kolkata adding multiple multispecialty hospitals, upgrading tertiary-care institutions, and expanding government backed facilities such as IPGMER and SSKM (Shalini et al., 2024). These developments have strengthened the city's capacity to provide specialized treatments in cardiology, oncology, orthopaedics, and reproductive medicine.

Mehta and Ray (2023) report that approximately 65% of foreign patients in Kolkata originate from neighbouring countries particularly Bangladesh, Nepal, and Bhutan owing to cultural proximity, linguistic familiarity, and geographical convenience. The presence of dedicated helpdesks, translators, visa facilitation services, and international coordinators in Kolkata's private hospitals reflects the region's increasing institutional readiness to serve foreign patients. Partnerships with tourism operators and hospitality providers have further enhanced patient experiences by offering packaged medical travel services.

Despite this growth trajectory, the literature emphasizes persistent research gaps. First, most studies on Eastern India focus on patient demographics and institutional profiles rather than the broader regional development implications. Second, the long-term economic impacts, employment contributions, and comparative competitiveness of West Bengal relative to other Indian states remain under the raised. As a result, the region offers fertile ground for empirical exploration and policy-oriented scholarship.

2.5 Challenges and Ethical Concerns in Medical Tourism

While medical tourism delivers economic benefits, scholars highlight concerns regarding ethical practices, regulatory gaps, and data limitations. Shalini et al. (2024) caution that increased foreign patient inflows may accelerate the emergence of a two-tier healthcare system, where local populations face potential resource diversion and inequitable access. Similarly, Mehta and Ray (2023) note the institutional risks associated with prioritizing international patients due to higher profit margins, which may inadvertently strain public hospitals already servicing high patient loads.

At the national level, India lacks a cohesive regulatory framework governing pricing, post-treatment responsibilities, and standardization of international patient care. Turner (2007) and Hyun (2022) argue that fragmented governance limits patient protection and reduces national competitiveness, particularly when international disputes or malpractice concerns arise. Post-treatment follow-up remains a significant challenge, as patients often return home without structured monitoring systems.

Without robust telemedicine partnerships or cross-border continuity-of-care agreements, the risk of postoperative complications increases.

Data availability is another constraint. National level statistics on medical tourism remain scattered and inconsistent, relying heavily on hospital level self-reporting rather than standardized national data systems (Hyun, 2022). This limits the ability of researchers and policymakers to accurately assess trends or design targeted interventions.

2.6 Theoretical Frameworks in Medical Tourism Scholarship

Multiple theoretical frameworks underpin medical tourism research, enabling scholars to examine globalization, competitiveness, and stakeholder dynamics. The General Agreement on Trade in Services (GATS) Mode 2 cross-border consumption offers a foundational lens to study patient mobility and global health markets (Shenkar et al., 2021). This perspective emphasizes the role of international policies, economic liberalization, and health-sector reforms in enabling cross-border healthcare flows.

The Sustainable Tourism Development Model (UNWTO) is frequently employed to evaluate socio-economic and environmental impacts of medical tourism. It captures the balance between economic gains, social equity, and long-term sustainability (Vovk, Beztelecsna, & Pliashko, 2021). The model is particularly useful in analysing how medical tourism influences regional development indicators such as employment, infrastructure, and community welfare.

Stakeholder Theory (Freeman, 1984) offers insights into the complex interactions among patients, hospitals, governments, facilitators, and communities. Ghosh and VK (2022) highlight that medical tourism destinations evolve through multi-stakeholder collaboration, requiring coordinated governance and marketing.

The Destination Competitiveness Model by Dwyer and Kim (2003) has also informed comparative research, emphasizing the importance of infrastructure, branding, and service quality. Hyun (2022) applied this model to understand how national policies, hospital accreditation, and tourism integration contribute to global positioning.

Collectively, these frameworks provide a multidimensional foundation for investigating the intersections of healthcare globalization, market competitiveness, and regional development.

2.7 Identified Gaps in the Literature

Despite the expanding body of global research, several gaps persist, particularly in relation to Eastern India:

2.7.1 Limited Focus on Regional Development Outcomes

Few studies comprehensively examine how medical tourism influences employment, infrastructure growth, and sectoral integration in West Bengal.

2.7.2 Insufficient Empirical Evidence from Emerging Medical Hubs

Most existing research relies heavily on data from Southern and Western India, with a scarcity of micro-level institutional studies from Eastern India.

2.7.3 Lack of Longitudinal and Comparative Assessments

Long term changes in cross-border patient flows, competitiveness, and economic impacts remain largely unmeasured.

2.7.4 Fragmented Policy Evaluation

There is little analysis of how state-level policies in Eastern India align with national initiatives such as “Heal in India”.

2.7.5 Limited Inter-Disciplinary Perspectives

Existing studies seldom integrate economic, sociological, and public health approaches to assess the multidimensional effects of medical tourism.

By addressing these gaps, the present study contributes a comprehensive and regionally grounded analysis of how medical travel shapes Eastern India’s developmental trajectory within the broader landscape of healthcare globalization.

III. RESEARCH METHODS

3.1 Research Design

This study adopts a qualitative exploratory research design to examine the dynamics of medical travel and its implications for regional development in Eastern India. Exploratory designs are appropriate for emerging or under-researched contexts, where complex institutional practices, subjective motivations, and inter-sectoral linkages must be understood holistically (Rai, 2019). Given that Kolkata and surrounding areas have only recently attracted scholarly attention in the field of medical tourism, a qualitative approach allows for deeper engagement with stakeholder perspectives and regional processes.

Kolkata was selected as the focal site because it serves as a major healthcare hub for neighbouring countries such as Bangladesh, Bhutan, and Nepal, as well as North-East Indian states.

As Medhekar, Wong, and Hall (2019) and Malhotra and Dave (2022) highlight, Eastern India presents a distinct institutional and socio-economic profile compared with established hubs like Chennai or Delhi. This study therefore examines how medical travel interacts with local healthcare infrastructures, hospital strategies, and sectoral spillovers, offering a grounded understanding of Eastern India's evolving position within healthcare globalization.

3.2 Data Collection

Primary Data

Primary data were collected from thirty-eight (38) semi-structured interviews conducted via email in 2024. Participants included hospital administrators, senior clinicians, international patient coordinators, and marketing representatives from leading institutions such as Apollo, AMRI, and Narayana Health. The interview instrument, designed as a semi-structured multiple-choice questionnaire (MCQ) with optional qualitative elaborations, captured respondents' views on:

- Institutional readiness for international patients
- Motivations of cross-border patients
- Infrastructure capabilities and accreditation systems
- Economic and operational impacts of medical travel
- Challenges in coordination, communication, and patient management

The structure of the questionnaire was informed by Ormond and Kaspar's (2019) emphasis on institutional perspectives in medical tourism research, enabling comparative insights while allowing for individualized responses.

The interview format was chosen to ensure accessibility and flexibility, particularly for busy hospital personnel. Email-based data collection also allowed participants to reflect on their responses without time pressure, increasing the reliability and depth of insights.

Secondary Data

Secondary Data were sourced from:

- Government policy documents (e.g., "Heal in India" initiative)
- Reports from Deloitte, FICCI, and the Medical Tourism Association
- Academic literature on medical tourism, global health mobility, and service trade (e.g., Shenkar et al., 2021; Biswas & Rai, 2023; Hyun, 2022)

- Institutional records, hospital websites, and promotional materials

This combination of primary and secondary data supports methodological triangulation, enhancing the credibility and contextual richness of the study.

3.3 Sampling Strategy

A purposive sampling approach was adopted to select information-rich participants who possessed direct experience with international patient services and institutional decision-making. As recommended by Gautam and Bhatta (2020), purposive sampling is effective in exploratory healthcare studies where subject-matter expertise and organizational insight are crucial.

The inclusion criteria were:

- Employment in hospitals receiving significant numbers of international patients
- NABH or JCI accreditation status
- Experience in specialties relevant to medical travel (e.g., cardiology, oncology, orthopaedics, fertility)
- Roles involving coordination, administrative planning, or patient interface

Kolkata's hospitals were selected because they act as regional gateways for patients from Bangladesh, Nepal, Bhutan, and India's North-East, thereby offering strategic insights into cross-border health mobility (Rai, 2019). The sampling strategy ensured a diverse set of professional perspectives, strengthening the study's analytical depth.

3.4 Analytical Framework

Data were analysed using thematic analysis, employing both deductive and inductive coding approaches. Deductive coding was guided by established themes in medical tourism literature—such as institutional readiness, patient motivations, infrastructure capacity, and ethical concerns. Inductive coding enabled the emergence of new patterns specific to Eastern India, such as geographic proximity advantages, cross-border cultural affinity, and marketing practices unique to Kolkata's hospitals.

The analytical framework was further anchored in:

GATS Mode 2 (Cross-Border Consumption)

This framework conceptualizes medical travel as a form of international trade in services, offering insights into policy regimes, market integration, and regulatory environments (Shenkar et al., 2021; Virani, Wellstead, & Howlett, 2020).

Sustainable Tourism Development Model (UNWTO)

This perspective supports evaluation of socio-economic spillovers, employment impacts, and long-term sustainability (Vovk et al., 2021).

These theoretical anchors ensured that findings were interpreted within both global and regional contexts, linking micro-level institutional observations to broader healthcare globalization narratives.

3.5 Validity, Reliability and Ethical Considerations

To ensure the trustworthiness and rigor of the findings, the following measures were undertaken:

Credibility

- Interviewees represented senior professionals directly involved in international patient services, strengthening content relevance.
- Themes were cross-validated using secondary data sources, reducing interpretive bias.

Transferability

- Detailed documentation of research context, hospital characteristics, and regional health landscape allows readers to assess the applicability of findings to other emerging medical tourism hubs.

Dependability

- A transparent coding process was followed, combining deductive and inductive methods to enhance analytic consistency.
- Reflexive memos were maintained during coding to document analytical decisions.

Confirmability

- Secondary data triangulation and verbatim adherence to participant responses minimized researcher subjectivity.

Ethical considerations were prioritized throughout. Participants were informed of the study's purpose, and confidentiality was maintained by anonymizing institutional identifiers. Participation was voluntary, and respondents could withdraw at any stage. As interviews were conducted via email, data storage followed standard digital security protocols.

IV. RESULTS

This section presents the key findings of the study based on thematic analysis of the 38 participant responses and triangulation with secondary data.

The results are organized into four central themes: (1) growth of medical travel in West Bengal, (2) institutional and infrastructural capacity, (3) economic spillovers and sectoral linkages, and (4) branding, marketing, and patient referral patterns. These themes collectively illustrate Eastern India's evolving role in healthcare globalization.

4.1 Growth of Medical Travel in West Bengal

Over the past decade, West Bengal particularly Kolkata has experienced significant expansion in cross-border patient mobility. This trend aligns with broader national growth in India's medical tourism sector but is shaped by unique regional advantages. As documented in previous studies (Rai, 2019; Biswas & Rai, 2023), Kolkata serves as a major referral destination for neighbouring countries due to cost advantages, cultural familiarity, and improved tertiary care infrastructure.

4.1.1 Motivations for Choosing Eastern India

Survey data indicate that international patients are primarily motivated by lower treatment costs, access to specialized medical services, and shorter waiting times. As shown in the participant responses:

- 38.9% identified lower cost as the primary reason for choosing India.
- 27.8% cited specialized medical services.
- 22.2% selected shorter waiting times.

These patterns reflect existing literature suggesting that India's cost competitiveness and advanced clinical expertise significantly influence global patient flows (Medhekar et al., 2019; Shenkar et al., 2021).

Respondents emphasized that foreign patients, particularly from Bangladesh and East Africa, perceive Kolkata as offering a favourable combination of affordability, specialist care, and cultural proximity. This reinforces Biswas and Rai's (2024) findings that shared linguistic and cultural ties reduce patients' perceived risk and enhance their comfort.

4.1.2 Hospital Records and Sectoral Evidence

Secondary data from WBIDC (2022) and hospital records show a 20–30% annual increase in foreign patient visits to major hospitals such as AMRI, Narayana Health, and Apollo Gleneagles. The highest demand is observed in:

- Cardiology
- Oncology
- Orthopaedic surgeries
- IVF and reproductive medicine

This aligns with global trends where patients seek technologically intensive, high-cost procedures abroad to avoid long waiting times or unaffordable prices in their home countries.

Hospitals in Kolkata have become important regional hubs for North-East India as well, receiving referrals from Assam, Tripura, Meghalaya, and Mizoram. This dual domestic international role places Eastern India in a unique position within the national healthcare landscape.

4.2 Institutional and Infrastructural Capacity

4.2.1 Accreditation and Quality Standards

All participating hospitals reported compliance with international or national accreditation mechanisms, including NABH and JCI. Participants noted that accreditation enhanced:

- Standardized clinical protocols
- Infection control systems
- Transparency in pricing and service quality
- Global recognition and patient trust

These views echo Ormond and Kaspar's (2019) argument that accreditation is a key determinant of international patient inflows.

4.2.2 International Patient Support Systems

Every surveyed institution had operational international patient help desks, which offer:

- Interpreter services (Bengali, Arabic, Nepali, French)
- Visa and travel assistance
- Pre-operative teleconsultations
- Post-operative communication and follow-up
- Hospital – hotel co-ordination

Such services reduce friction in the cross-border patient journey and enhance overall satisfaction.

4.2.3 Perceptions of Hospital Infrastructure

Participants were asked to assess the quality of hospital infrastructure:

- 33.3% rated it Excellent
- 27.8% rated it Good
- 11.1% rated it Poor

These evaluations reflect substantial improvements in tertiary care infrastructure in Kolkata, aligning with Rai's (2019) assessment of Eastern India's rising competitiveness.

Notably, dissatisfaction among a minority was linked to communication challenges, coordination gaps, and perceived inconsistencies in service quality issues that require organizational attention to sustain market competitiveness.

4.2.4 Medical Specialties Accessed by International Patients

Survey responses indicate high demand for:

- Oncology treatments (reported by multiple participants)
- Cardiology
- Orthopaedics
- Fertility services

The technical sophistication of these specialties has strengthened Kolkata's reputation as a comprehensive medical travel destination.

4.3 Economic Spillovers and Sectoral Linkages

Medical tourism in Eastern India has generated notable economic and employment impacts beyond the healthcare sector. This aligns with Dwyer et al.'s (2003) multiplier effect model, which posits that medical tourists fuel broader regional development.

4.3.1 Employment Generation

Hospitals estimated that growth in international patient volume has expanded employment in:

- Patient coordination and international relations
- Translation and language services
- Travel facilitation
- Hospitality and accommodation
- Transportation and logistics

These findings correspond with Aich and Banerjee's (2023) claim that every 100 medical tourists generate approximately 80 ancillary jobs.

4.3.2 Spending and Tourism Integration

Survey findings show:

- 66.7% of patients combined healthcare with leisure activities.
- 88.9% reported being Satisfied or Very Satisfied with their experience.

This reflects the increasing integration of healthcare with tourism a hallmark of sustainable medical travel markets (Malhotra & Dave, 2022).

Medical tourists reportedly spend 3 - 5 times more than leisure tourists, thereby boosting:

- Local hotels and serviced apartments
- Restaurants and retail establishments
- Tourist attractions
- Local transportation operators

Participants noted that post-2020, hospitals increasingly collaborate with tourism agencies to offer medical-travel packages, enhancing ease of travel and cross-sector coordination.

4.3.3 Infrastructure Development

The growth of medical travel has accelerated:

- Road and airport improvements
- Diagnostic centre proliferation
- Investments in digital health systems and telemedicine
- Expansion of hotel and guest house facilities near hospital clusters

These spillovers create positive externalities that benefit local populations as well.

4.3.4 Sectoral Beneficiaries Beyond Healthcare

Participants highlighted collaborations with:

- Pharmaceutical distributors
- Diagnostic laboratories
- Wellness and AYUSH centres
- Rehabilitation and physiotherapy units

These inter-sectoral linkages support diversified regional growth and align with national goals under “Heal in India”.

4.4 Branding, Marketing, and Patient Referral Patterns

4.4.1 Strategic Marketing Approaches

Hospitals in Kolkata have increasingly adopted region-specific marketing campaigns targeting:

- Bangladesh (the largest inbound market)

- Nepal and Bhutan
- East African countries

Common promotional strategies include:

- Participation in medical fairs in Dhaka and Nairobi
- Digital advertisements in Bengali and Arabic
- Collaborations with travel facilitators
- Teleconsultation initiatives
- Branding Kolkata as a “Gateway to Indian Medical Excellence”

This aligns with Vovk et al.’s (2021) observation that digital branding and targeted communication dominate contemporary medical tourism promotion.

4.4.2 Referral Channels and Patient Awareness

Survey data indicate that patients discovered hospitals through:

- Internet searches – 33.3%
- Family/friend suggestions – 27.8%
- Medical tourism facilitators – 22.2%
- Doctor referrals – remaining cases

These patterns underscore the importance of peer networks, digital presence, and facilitator partnerships in shaping patient mobility. Word-of-mouth influence remains particularly strong in Bangladesh and Nepal, where familial networks guide healthcare decisions.

4.4.3 Likelihood of Recommending Eastern India

When asked whether they would recommend Eastern India for medical treatment:

- A notable proportion responded “Definitely yes” or “Probably yes”, indicating strong patient satisfaction.
- A minority expressed hesitation due to communication gaps or perceived coordination issues.

These findings highlight both the strengths and the areas requiring improvement in Kolkata’s patient management systems.

4.5 Summary of Key Indicators

A synthesized summary of major findings is presented below:

Indicator Value	/ Finding Sources
Annual growth in foreign patients 20–30%	WBIDC (2022); Rai (2019)
Most demanded treatments	Cardiology, Oncology, IVF, Orthopaedics Hospital records; Medhekar et al. (2019)
Medical tourist spending	3–5× more than leisure tourists Virani et al. (2020); Malhotra & Dave (2022)
Primary travel motivation	Cost (39%), Specialization (28%) Primary survey
International helpdesk availability	100% of surveyed hospitals Primary survey
Infrastructure satisfaction	61% rated Excellent or Good Primary survey

Overall Interpretation

The results illustrate that:

- Cost advantages, specialized treatments, and geographic proximity drive medical travel into West Bengal.
- Hospitals demonstrate considerable institutional capacity, supported by accreditation, staff capabilities, and international patient units.
- Economic spillovers significantly benefit hospitality, tourism, diagnostics, and local employment sectors.
- Strategic marketing reinforces Kolkata's position as a rising medical travel destination.
- Challenges remain in communication, post-treatment coordination, and regulatory clarity.

V. CONCLUSION

This study examined the evolving role of medical travel in Eastern India and its implications for regional development within the broader framework of healthcare globalization. By integrating primary insights from hospital administrators and healthcare professionals with secondary data and existing scholarship, the research provides a comprehensive understanding of how affordability, specialization, institutional capacity, and cultural proximity shape the rise of Kolkata as a significant medical tourism destination.

The findings reveal that West Bengal has transitioned from a peripheral provider of healthcare services to an increasingly recognized regional hub for medical travel, particularly for patients from Bangladesh, Nepal, Bhutan, and East African countries.

This growth is driven by a convergence of factors: comparatively low medical costs, availability of high-quality tertiary care, expanding hospital infrastructure, and shared linguistic and cultural affinities with neighbouring countries. The presence of internationally accredited institutions such as AMRI, Narayana Health, and Apollo Gleneagles has strengthened Kolkata's global credibility, enabling it to compete with more established hubs in Southern and Western India.

A key insight from this study is the multiplier effect of medical tourism on regional development. Beyond the clinical domain, the influx of medical travellers has stimulated economic activity across hospitality, transportation, diagnostics, wellness, and tourism sectors. Employment generation for translators, patient coordinators, facilitators, and hospitality staff reflects the cross-sectoral nature of medical tourism's impact, confirming prior observations that healthcare services can serve as a catalyst for broader urban economic transformation. The fact that many patients combine treatment with leisure activities underscores Kolkata's potential to enhance its dual branding as both a cultural and medical destination.

However, the study also identifies several challenges that could constrain the sustainable growth of the sector. Ethical concerns such as the potential formation of a two-tier healthcare system prioritizing foreign patients pose risks to equitable access for local populations. The absence of a unified regulatory framework covering pricing transparency, patient safety, liability issues, and post-treatment follow-up creates vulnerabilities for both patients and providers. In particular, structured post-operative monitoring remains limited, despite the proliferation of telehealth services.

Without consistent follow-up mechanisms, international patients may experience complications upon returning home, which can negatively impact destination reputation and quality assurance.

Additionally, marketing fragmentation and weak state-level coordination hinder Kolkata's ability to project a unified international identity. While hospitals independently conduct outreach campaigns in Bangladesh and Africa, a coordinated branding strategy at the governmental level could enhance visibility and credibility, similar to the structured initiatives seen in states like Tamil Nadu or Karnataka. Strengthening airport connectivity, expanding logistics services, and facilitating international insurance acceptance would further bolster Kolkata's competitiveness.

From a theoretical perspective, the study contributes to the literature on healthcare globalization, destination competitiveness, and sustainable tourism development by illustrating how emerging medical travel destinations integrate into global health value chains. The Eastern Indian context demonstrates that cost advantages, cultural affinity, and geographic proximity can compensate for weaker international branding—at least temporarily. However, long-term sustainability depends on institutional strengthening, governance reform, and strategic planning.

Based on the findings, several actionable recommendations emerge:

1. Establish a State-Level Medical Tourism Development Authority to regulate standards, coordinate branding, manage disputes, and engage international insurance providers.
2. Develop cross-border telehealth partnerships, ensuring systematic pre- and post-operative care through formal agreements with providers in Bangladesh, Nepal, and Bhutan.
3. Enhance airport and transport connectivity to facilitate smoother patient mobility and strengthen Kolkata's role as a regional entry point.
4. Implement equitable healthcare policies, ensuring that medical tourism revenues are reinvested into public health facilities and rural outreach programmes.
5. Integrate AYUSH and wellness tourism with mainstream hospital care to diversify Kolkata's medical travel offerings.

Ultimately, the study concludes that medical travel represents a significant opportunity for Eastern India to simultaneously advance economic development, strengthen healthcare infrastructure, and enhance global connectivity.

However, the sector's future success hinges on strategic governance, ethical safeguards, and coordinated policymaking. With thoughtful investment and multi-stakeholder collaboration, West Bengal can evolve into a model of sustainable healthcare globalization that benefits both international patients and local communities.

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