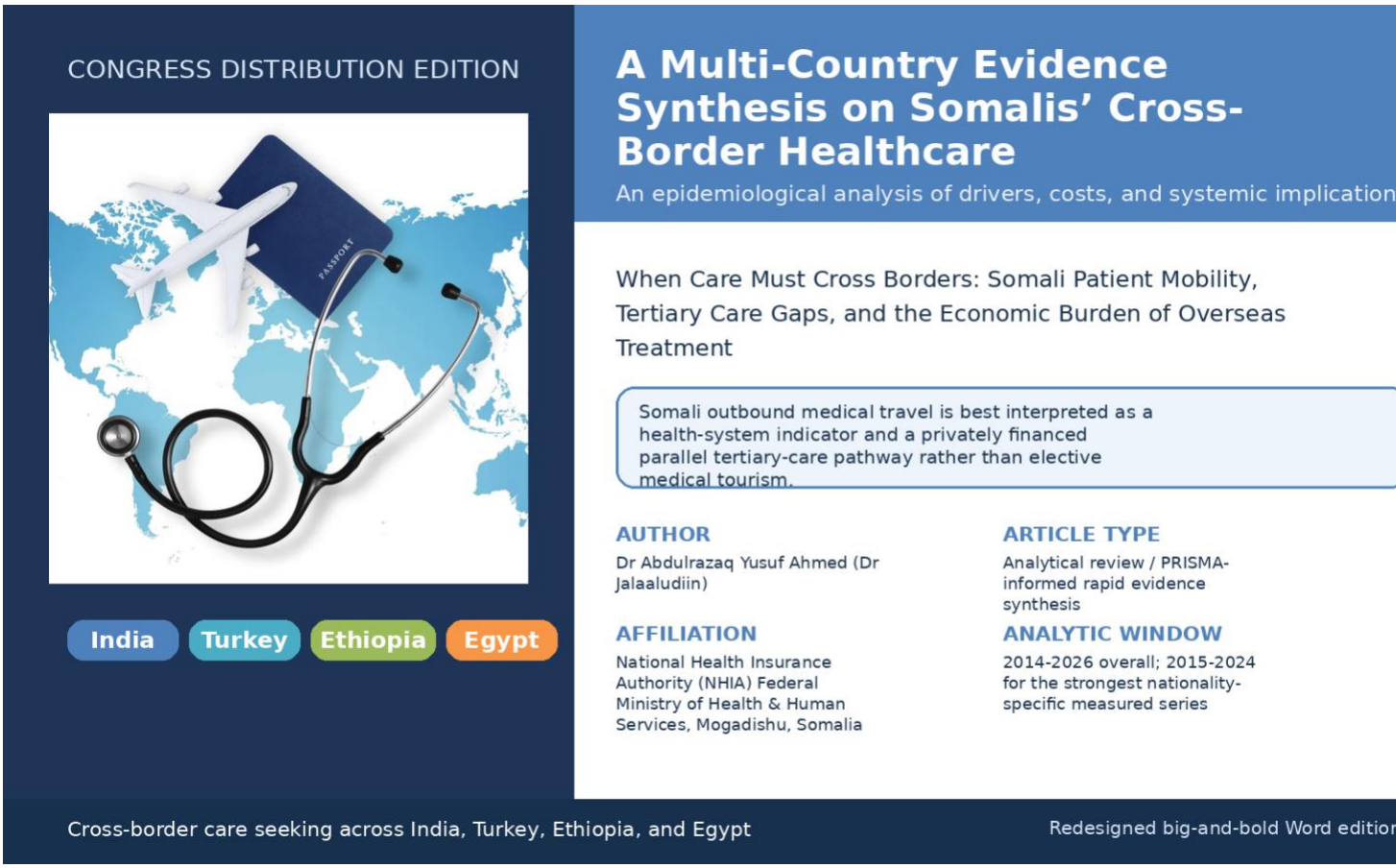


A Multi Country Evidence Synthesis on Somali Cross-Border Healthcare: An Epidemiological Analysis of Determinants, Costs, and Systemic Implications.

Transnational Healthcare Access: Somali Patient Migration, Tertiary Care Deficiencies, and Financial Implications of International Medical Treatment

Written by Dr. Abdulrazaq Yusuf Ahmed Drjalaaludiin, a PhD in Health Economics and an expert in Demographics Health Systems, the study focuses on Somali nationals seeking medical treatment abroad from 2014 to 2026.

Executive Snapshot

Somali cross-border healthcare seeking, 2014-2026 analytical window

BEST-MEASURED CORRIDOR

India

Official Somali medical-purpose arrivals and medical visas provide the clearest public series.

VERIFIED DESTINATION ANCHOR

Turkey: 2,742

Peer-reviewed 2019 anchor confirms substantial Somali patient flows but no full public annual series.

MEAN DIRECT HOUSEHOLD COST

US$8,543

Direct per-episode burden combines procedures, accommodation, travel, and visa/administration costs.

CENTRAL 2024 SPEND SCENARIO

US$219.3M

Illustrative national spending envelope across four corridors highlights major macroeconomic leakage.

Four-country analytical lens

The review treats outbound care as a health-system signal rather than elective tourism.

India

- Strongest measurable series
- High-volume tertiary destination
- Cardiac, oncology, renal and diagnostics

Turkey

- Verified 2019 Somali anchor
- Specialized surgery and fertility demand
- Navigation and intermediary concerns

Ethiopia

- Regional proximity advantage
- Urgent and intermediate care pathway
- Sparse Somalia-specific quantified series

Egypt

- Strong demand signals
- Cardiac and oncology pull factors
- Social and financial vulnerability during long stays

Policy signals

- **Build a national outbound referral registry**
- **Protect households from catastrophic tertiary costs**
- **Govern unavoidable foreign referrals more selectively**
- **Invest in high-leakage domestic tertiary platforms**

A Multi Country Evidence Synthesis on Somali Cross-Border Healthcare: An Epidemiological Analysis of Determinants, Costs, and Systemic Implications.

Transnational Healthcare Access: Somali Patient Migration, Tertiary Care Deficiencies, and Financial Implications of International Medical Treatment

Article type	Analytical review / PRISMA informed rapid evidence synthesis
Analytical timeframe:	from 2014 to 2026 for the most robust nationality specific interventions.
Author	Dr Abdulrazaq Yusuf Ahmed (Dr Jalaaludiin)
Affiliation	1-National Health Insurance Authority (NHIA), Federal Ministry of Health & Human Services, Mogadishu, Somalia 2-RIYAADA Institute For Leadership & Governance
Correspondence	drjalaal@hotmail.com; drjalaalahmed@gmail.com; drjalaal@nhia.gov.so
Short running title	Somali Cross Border Health Care Seeking

Key Manuscript Premise: The Phenomenon Of Somali Patients Seeking Medical Treatment Abroad Should Be Viewed Primarily As A Reflection Of The State Of The Healthcare System, As Well As A Privately Funded Alternative To Traditional Tertiary Care, Rather Than Being Categorized Simply As Elective Medical Tourism.

Foreword

This article examines a critical yet underexplored dimension of Somalia's health system: the persistent movement of patients across borders in search of essential and specialized medical

care. While such movement is often simplistically described as medical tourism, the evidence synthesized in this paper demonstrates that, in the Somali context, it is more accurately understood as a structural response to domestic gaps in tertiary care, financial protection, diagnostic capacity, and continuity of treatment.

This review aims to shift the discussion from anecdotal observations to policy-relevant analysis by bringing together available evidence on Somali patients seeking care in India, Turkey, Ethiopia, and Egypt. It emphasizes that outbound medical travel is not merely a matter of individual choice but a reflection of broader health-system fragility, the consequences of underinvestment, and the absence of effective referral and risk-pooling mechanisms. The findings further highlight the profound household and national economic burden associated with overseas treatment, including catastrophic out-of-pocket expenditure, distress financing, and substantial capital leakage.

This paper is therefore offered not only as an academic synthesis, but also as a call for serious policy reflection. If Somalia is to advance toward Universal Health Coverage, strengthen public trust, and reduce avoidable medical displacement, then investment in tertiary care, referral governance, financial protection, and health-system stewardship must become a national priority. It is hoped that this work will contribute to a more informed dialogue among researchers, policy-makers, practitioners, and development partners committed to building a more equitable and resilient Somali health system.

Abstract

Background	Cross border care seeking among Somali nationals reflects structural deficits in specialized service availability, continuity of care, and financial protection. Publicly accessible evidence is strongest for the India corridor but remains incomplete for other destinations.
Objective	To synthesize the best available evidence on the scale of Somali outbound medical travel, its principal clinical drivers, measurable and unmeasurable outcome domains, household and national economic burden, and the obstacles

Background	Cross border care seeking among Somali nationals reflects structural deficits in specialized service availability, continuity of care, and financial protection. Publicly accessible evidence is strongest for the India corridor but remains incomplete for other destinations.
	patients face across India, Turkey, Ethiopia, and Egypt.
Methods	This paper uses an extended IMRaD analytical structure and a PRISMA informed rapid evidence synthesis based on structured review of official Indian parliamentary annexures, peer reviewed Turkey evidence, MedCOI and COI materials on service gaps in Mogadishu, World Bank health financing documentation, and medical visa guidance relevant to Somali applicants.
Results	India is the only destination with a nationality specific public series supporting decade window quantification: 3,072 Somali medical purpose arrivals in 2015, 5,549 in 2016, 4,964 in 2017, and medical visas issued of 3,454 in 2019, 1,386 in 2020, 4,162 in 2021, 10,206 in 2022, 16,411 in 2023, and 12,261 in 2024. Turkey provides a verified 2019 anchor of 2,742 Somali patients but no accessible full series. The mean direct household cost per outbound episode is estimated at US$8,543, while the central four corridor scenario places

Background	Cross border care seeking among Somali nationals reflects structural deficits in specialized service availability, continuity of care, and financial protection. Publicly accessible evidence is strongest for the India corridor but remains incomplete for other destinations.
	2024 outbound spending at approximately US$219.3 million.
Conclusion	Somali outbound medical travel is substantial, inequitable, and economically consequential. The policy response should combine a national outbound referral registry, improved financial protection for catastrophic illness, selective governance of unavoidable foreign referral, and domestic investment in high leakage tertiary service platforms.

Keywords: Somalia; cross border health care; tertiary care; catastrophic expenditure; continuity of care.

Table of Contents

List **of Figures**

List of Tables


PASSPORT


INSURANCE

1. Introduction

1.1 Background and problem statement

Over the past decade, Somali outbound medical mobility has emerged as a significant public health and socioeconomic concern. This migration for healthcare is not incidental but is rooted in persistent systemic shortcomings, historical disruptions, and ongoing socioeconomic challenges that have collectively compromised Somalia's domestic healthcare system.

The underlying causes of this trend span clinical, structural, economic, and sociopolitical domains. Since the dissolution of the central government in 1991, Somalia has endured prolonged conflict, chronic political instability, and sustained economic fragility. These factors have systematically weakened the nation's public health infrastructure, resulting in a fragmented and largely unregulated healthcare sector. Advanced tertiary services such as oncology, cardiology, nephrology, and complex surgical procedures are either entirely unavailable or accessible only to a limited urban elite.

Epidemiological data show Somalia faces a dual burden of communicable and non-communicable diseases, which overwhelm its already fragile health infrastructure and hinder effective management of complex medical cases. Extended periods of instability have contributed to the degradation of physical infrastructure and prompted the exodus of qualified medical professionals, further diminishing the sector's capacity.

A survey by the SIDRA Institute in Puntland emphasizes the scale of the issue: 31 percent of patients sought care abroad due to lack of essential local services, while 41 percent were motivated by dissatisfaction with the quality of domestic care.

Somalia consistently ranks among countries with the lowest global health indicators. Maternal mortality rates range from 621 to 692 per 100,000 live births, and under-five mortality rates are between 117 and 137 per 1,000 live births. These figures highlight substantial gaps in both primary and tertiary healthcare and illustrate the nation's reliance on international medical travel. For many Somali families, seeking healthcare beyond national borders is a necessary response to systemic limitations, economic adversity, and urgent needs for specialized services unavailable within Somalia.

The clinical rationale for outbound medical travel is well-documented. Patients often present at advanced stages of disease due to delayed diagnoses, limited local expertise, and insufficient diagnostic infrastructure. Research indicates nearly one-third of

patients travel abroad for services unavailable domestically, and over 40 percent do so because of dissatisfaction with local healthcare quality. Access to foreign medical treatment is therefore driven by necessity rather than choice.

Deficiencies in Somalia's healthcare system remain the principal catalyst for seeking medical care overseas. Following years of conflict, healthcare delivery has shifted predominantly toward privatization, led by for-profit entities and diaspora investors. While this has increased the number of clinics, especially in urban areas such as Mogadishu, regulatory oversight and quality assurance have not kept pace, and access to advanced diagnostic services remains limited.

A considerable proportion of Somalia’s population lives in rural and nomadic communities where access to essential primary healthcare is minimal or nonexistent. This disparity is compounded by the absence of internationally accredited hospitals and a critical shortage of qualified professionals, particularly in mental health with only three psychiatrists and 25 trained mental health nurses serving a population exceeding 15 million.

Vital tertiary services, including oncology, advanced cardiology, and renal care, are either absent or severely under-resourced, making overseas treatment indispensable. These systemic deficiencies have fostered a "medical visa" culture, whereby treatment abroad is a survival imperative rather than a preference.

These conditions compel Somali families to make difficult decisions, often liquidating assets to finance treatment abroad. Such actions expose households to considerable financial risk and health-related expenditures, which may have lasting effects across generations.

The impact of outbound medical travel extends well beyond economic hardship. Somali patients admitted to foreign hospitals frequently present with advanced illnesses, increasing morbidity and mortality risks. Upon return, the absence of continuity in care often results in complications and treatment failures, further exposing weaknesses in Somalia’s health system.

Between 2014 and 2026, Somali medical travelers have primarily sought services in India, Turkey, Egypt, and Ethiopia. These countries function as key healthcare corridors, selected based on cost-effectiveness, geographical proximity, diplomatic relations, shared religious ties, and access to advanced medical technologies.

Economically, outbound medical mobility presents significant challenges for Somali households and the national economy. In the absence of comprehensive health insurance or effective risk-sharing mechanisms, over 44 percent of healthcare expenditures are paid out-of-pocket, exceeding regional and global averages. Families frequently sell assets, rely on remittances, and incur substantial costs to access treatment abroad, leading to capital flight, rising household debt, and perpetuation of poverty.

Medical destination choices such as India, Turkey, Egypt, and Ethiopia are determined by comparative treatment costs, geographic proximity, ease of obtaining medical visas, cultural and religious alignment, perceived standards of care, and availability of advanced technologies and specialties. India and Turkey offer affordable, technologically sophisticated services, while Egypt and Ethiopia provide accessible options for urgent and intermediate healthcare needs.

Beyond economic implications, this trend carries substantial clinical repercussions. Delayed disease detection, insufficient follow-up, and discontinuity of care upon return often result in suboptimal clinical outcomes, postoperative complications, and unsuccessful treatments. This underscores a fundamental structural disparity: Somalia's domestic health system is overstretched, underfunded, and unable to effectively handle both communicable and non-communicable diseases.

In summary, Somali outbound medical mobility reflects systemic fragility, financial constraints, and pervasive disparities in the national health sector. It demonstrates the consequences of state collapse, loss of skilled workforce, chronic underinvestment in infrastructure, and limited health financing mechanisms. Without comprehensive reforms including expanded tertiary care capacity and robust national health financing Somalis will continue to seek medical care abroad out of necessity.

Cross-border healthcare seeking in fragile and under-resourced settings is often described as medical tourism, yet this term is inadequate for the Somali context. For many Somali households, care abroad is not an elective preference but a compensatory strategy for accessing diagnostics, tertiary services, and continuity-dependent treatments unavailable, unaffordable, or unreliable domestically.

Somali outbound medical mobility should thus be regarded as both a lifeline and a health-system indicator. It reveals weaknesses in domestic service provision, fragmented referral pathways, and the extent to which households convert social capital into cash to obtain care. Under conditions of high out-of-pocket spending and minimal

insurance coverage, the threshold for travel is shaped more by liquidity, documentation access, and diaspora support than clinical need alone.

The magnitude of the issue is considerable. In India the best-measured corridor Somali medical arrivals numbered 3,072 in 2015, 5,549 in 2016, and 4,964 in 2017; medical visas issued totaled 3,454 in 2019, 1,386 in 2020, 4,162 in 2021, 10,206 in 2022, 16,411 in 2023, and 12,261 in 2024. Even accounting for definitional differences and repeat travel, these figures establish a credible minimum and highlight a notable post-pandemic surge.

1.2 Literature review and conceptual gap

Key Themes in the Literature and Existing Knowledge Gaps

The literature on Somali outbound healthcare identifies four central themes that help to explain the dynamics of medical travel and its impacts.

1. **Structural Deficiencies Driving Outbound Healthcare**

The primary motivation for seeking medical care abroad stems from significant structural deficiencies in Somalia's healthcare system. Notably, there are major gaps in the provision of oncology services, advanced cardiovascular care, renal replacement therapies and transplantation, advanced diagnostics, as well as certain reproductive and orthopedic services. These inadequacies compel Somali patients to pursue treatment in foreign medical centers equipped to address their complex health needs.

2. **Financial Challenges and Household Coping Mechanisms**

The financial landscape for Somali households seeking care abroad is exceptionally difficult. Out-of-pocket expenditures remain high due to insufficient risk pooling mechanisms. As a result, families often rely on remittances, deplete personal savings, organize community fundraising, or liquidate assets to cover the costs associated with international medical travel.

3. **Destination Experiences: Beyond Clinical Outcomes**

Evidence from patient experiences in destination countries reveals that outcomes are shaped by more than just the quality of clinical care. Navigational support, the role of intermediaries, administrative barriers, and the availability of post-return follow-up care all significantly influence patient journeys and final health results.

4. Data Limitations Across Medical Corridors

Available data on Somali outbound healthcare is inconsistent across destination countries. India offers the most quantifiable metrics, Turkey provides partial measurements, while Ethiopia and Egypt are primarily documented with qualitative descriptions instead of robust, nationality-specific annual data series.

Knowledge Gaps in Current Literature

Despite the insights provided, a significant knowledge gap persists. Somalia lacks a national registry system for outbound medical referrals that would link patient diagnoses, destinations, financing mechanisms, treatments received, and subsequent outcomes. As a result, while the movement of patients is visible, comprehensive assessment of patient outcomes remains elusive. Existing studies are comprehensive regarding the dynamics of healthcare corridors and offer moderate insights into travel volumes to certain destinations. However, there is limited longitudinal data on patient morbidity, mortality, cost-effectiveness, and exposure to malpractice.

Objectives and Scope of This Paper:

This paper combines reliable indicators of patient movement, clarifies service patterns at different destinations, estimates household costs, and identifies common mechanisms of treatment failure. Given the variability in data from fragile health systems, the aim is to synthesize these sources without assuming uniformity.

Epidemiological Drivers and Clinical Demand in Somali Outbound Care

Somalia's health sector is currently experiencing an epidemiological transition characterized by the persistence of communicable diseases such as tuberculosis, cholera, measles, and malaria, alongside a marked increase in the prevalence of non-communicable diseases (NCDs). This simultaneous burden of infectious and chronic illnesses places significant strain on the country's healthcare infrastructure.

As a result of these systemic challenges, Somali patients increasingly seek medical treatment abroad.

The decision to pursue care outside Somalia is primarily driven by the inadequacies within local healthcare services, rather than by personal preference. This trend highlights both longstanding vulnerabilities in the health system and emerging clinical challenges, underscoring the urgent need for comprehensive reform to address these issues and reduce reliance on outbound medical migration.

Disease-Specific Migration Drivers

Somali patients pursue medical treatment abroad due to a variety of complex and evolving clinical factors.

These drivers stem from the ongoing burden of infectious diseases as well as a rising prevalence of non-communicable diseases (NCDs).

The primary conditions prompting outbound medical migration include cardiovascular diseases, cancer, orthopedic issues, renal disorders, reproductive health concerns, and complicated communicable diseases. Each category reflects significant deficiencies in Somalia's tertiary healthcare system and leads to referrals to specialized centers in other countries.

The following sections analyze these migration drivers, highlighting their clinical, infrastructural, and socioeconomic dimensions.

Cardiovascular and Thoracic Diseases

Ischemic heart disease, hypertensive heart disease, and heart failure are major reasons Somali patients seek international care. Due to the lack of systematic screening and inadequate management of hypertension and hyperlipidemia in Somalia, patients often present with advanced coronary artery disease.

This frequently requires procedures such as coronary artery bypass grafting (CABG), valve replacement, and pacemaker implantation. Because Somali healthcare facilities lack the capacity to perform these interventions, patients commonly travel to India and Egypt, which are recognized for their advanced cardiothoracic services, surgical expertise, and cost-effective treatment options.

This migration trend highlights the urgent need to strengthen cardiovascular services and infrastructure within Somalia.

Oncology and Malignant Tumors

Somalia has limited oncology services, particularly in radiotherapy, advanced chemotherapy, and diagnostic imaging technologies like MRI and PET scans.

These gaps result in delayed cancer diagnosis and drive patients to seek care at well-equipped centers abroad, mainly in India, Turkey, and Egypt. International records show that Somali oncology patients often present with advanced-stage disease, indicating systemic inadequacies in Somalia's diagnostic and treatment capabilities.

These shortcomings increase morbidity and mortality rates and place considerable financial strain on affected families.

Orthopedics and Traumatology

High rates of musculoskeletal injuries and degenerative joint diseases in Somalia are largely due to civil conflict and limited trauma care infrastructure. Advanced orthopedic procedures, such as total knee and hip replacements, are rarely performed locally because of infection risks and insufficient surgical expertise. Consequently, Turkey and India are preferred destinations, offering minimally invasive surgeries, quality prosthetics, and specialized rehabilitation services. This migration pattern illustrates the need for greater investment in Somalia's trauma and rehabilitation infrastructure to improve clinical outcomes and reduce complications.

Urology, Nephrology, and Renal Disorders

Chronic kidney disease and end-stage renal failure are common among Somali adults, yet the scarcity of hemodialysis centers restricts regular access to treatment. Patients who can afford it often travel overseas for renal transplantation, especially to India, which is known for its ethical regulatory framework supporting live donor transplants for international recipients.

The lack of adequate nephrology services and transplant infrastructure in Somalia highlights disparities in access and outcomes, signaling an urgent need for improvement in renal care capacity.

Reproductive Health and Infertility

Infertility and reproductive health concerns increasingly motivate Somali patients to seek care abroad. Advanced fertility treatments, such as In Vitro Fertilization (IVF), are mainly pursued in Turkey, which offers technological expertise, cultural compatibility, and adherence to religious values.

The demand for specialized reproductive services outside Somalia underscores the limitations of domestic provision and highlights the importance of sociocultural factors in healthcare decision-making.

Complex Communicable Diseases

While basic infectious diseases are managed locally, complex cases such as multidrug-resistant tuberculosis (MDR TB) and HIV co-infections require treatment in neighboring countries or through international humanitarian initiatives. Displaced

Somali populations in Ethiopia frequently present with severe infectious diseases, leading to coordinated interventions by global organizations within border camps. Managing complicated communicable diseases remains a significant challenge and calls for collaboration between national health authorities and international partners to improve diagnosis, treatment, and containment strategies.

In summary, the primary factors driving outbound medical travel from Somalia are rooted in systemic healthcare inadequacies, limited tertiary care capacity, and the persistent prevalence of both communicable and non-communicable diseases. Disease-specific migration trends underscore substantial gaps in service delivery, compelling patients to seek essential care abroad.

Addressing these challenges requires comprehensive reforms, targeted infrastructure investment, workforce development, and robust referral and continuity-of-care mechanisms to support sustainable population health outcomes.

Building upon these disease-specific migration drivers, it is clear that Somali outbound medical travel is not merely a matter of personal preference but a direct manifestation of systemic shortcomings in domestic healthcare provision.

This context frames cross-border care as a critical indicator of health system vulnerability, where clinical necessity, infrastructural inadequacies, and financial constraints converge to propel patients toward international destinations. The complex interplay of push factors such as unavailable services and limited capacity alongside pull factors including advanced diagnostics, quality care, and sociocultural alignment in host countries, underscores the depth of these challenges.

As the subsequent sections explore the conceptual and analytical frameworks for understanding cross-border care, it becomes evident that Somali medical migration is shaped by structural health system failures and the persistent need for comprehensive reforms, better data collection, and targeted policy interventions to achieve sustainable improvements in population health.

Conceptual Framing: Cross Border Care as an Indicator of Health System Weakness

In regions with limited resources and fragile health systems, cross-border health care is frequently mischaracterized as "medical tourism." This terminology fails to accurately reflect the reality, as individuals typically seek medical treatment abroad

to access services particularly diagnostics and advanced care that are unavailable, unaffordable, or perceived as unreliable in their home country. In Somalia, this phenomenon should be recognized as an indication of systemic weaknesses within the healthcare sector, driven by clinical needs, supply constraints, and financial barriers rather than discretionary consumer choice. Viewing medical migration through this lens underscores that it is primarily a response to structural deficiencies in healthcare delivery, rather than voluntary travel for elective purposes.

Analytical Framework: Push Pull Dynamics in Outbound Care Seeking

This review uses a push-pull framework, arguing that seeking medical care abroad comes from domestic "push" factors like unavailable services, low perceived quality, and poor management of chronic diseases and destination "pull" factors, such as better care, shorter wait times, shared language or culture, strong diaspora ties, and help from intermediaries. In Somalia, these motivations are heavily influenced by the health financing system: with most payments coming out of pocket, household finances and access to social support become the main limitations, often outweighing medical need. Understanding this complexity helps us see cross-border health care as a necessary response to deeper health system issues, rather than just a personal choice.

Evidence Tiering and Data Limitations:

Somali outbound medical travel analysis is challenged by the lack of a national registry that tracks referrals abroad, including critical patient-level information such as diagnoses, costs, and outcomes.

As a result, researchers must depend on proxy indicators primarily migration statistics like arrivals and visa issuances rather than comprehensive clinical datasets.

To address these limitations, the analytical framework distinguishes three tiers of evidence. The first tier includes directly measured movement indicators, which are the most reliable sources of information.

The second tier involves credible inferences, formed by triangulating available movement data with recognized market parameters. The third tier encompasses outcomes that remain unquantifiable, pending the establishment of new registries and systematic follow-up mechanisms.

This tiered methodology is crucial for maintaining analytical rigor. It enables policymakers to utilize current information effectively while identifying areas where further data collection and improvements to the system are needed. By applying this approach, the analysis achieves greater nuance, prioritizing directly measurable indicators and informed inferences. The review recognizes both the strengths and the inherent limitations present in the available data.

Through this framework, robust syntheses of destination volumes are developed, and data tiers are classified for each principal travel corridor.

However, significant gaps persist due to the absence of comprehensive registries and systematic patient tracking.

The framework underscores the necessity for enhanced data infrastructure to support improved monitoring and informed policy evaluation. Ultimately, this structured methodology provides a pathway for interpreting current trends, supporting targeted health system reforms, and paving the way for more accurate and actionable insights as new evidence emerges.

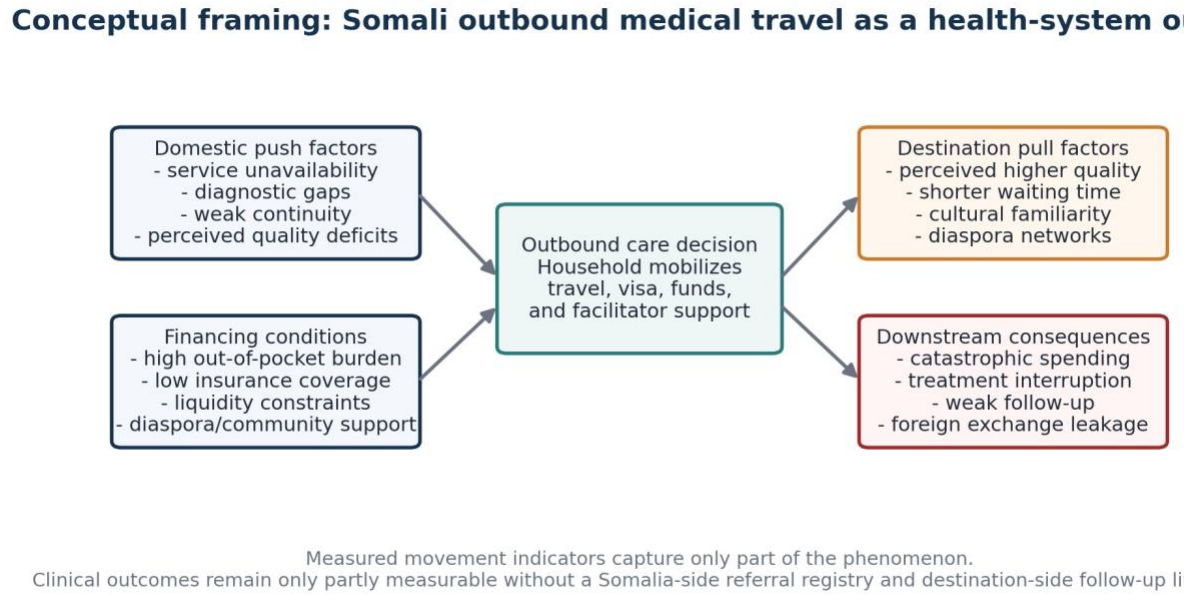


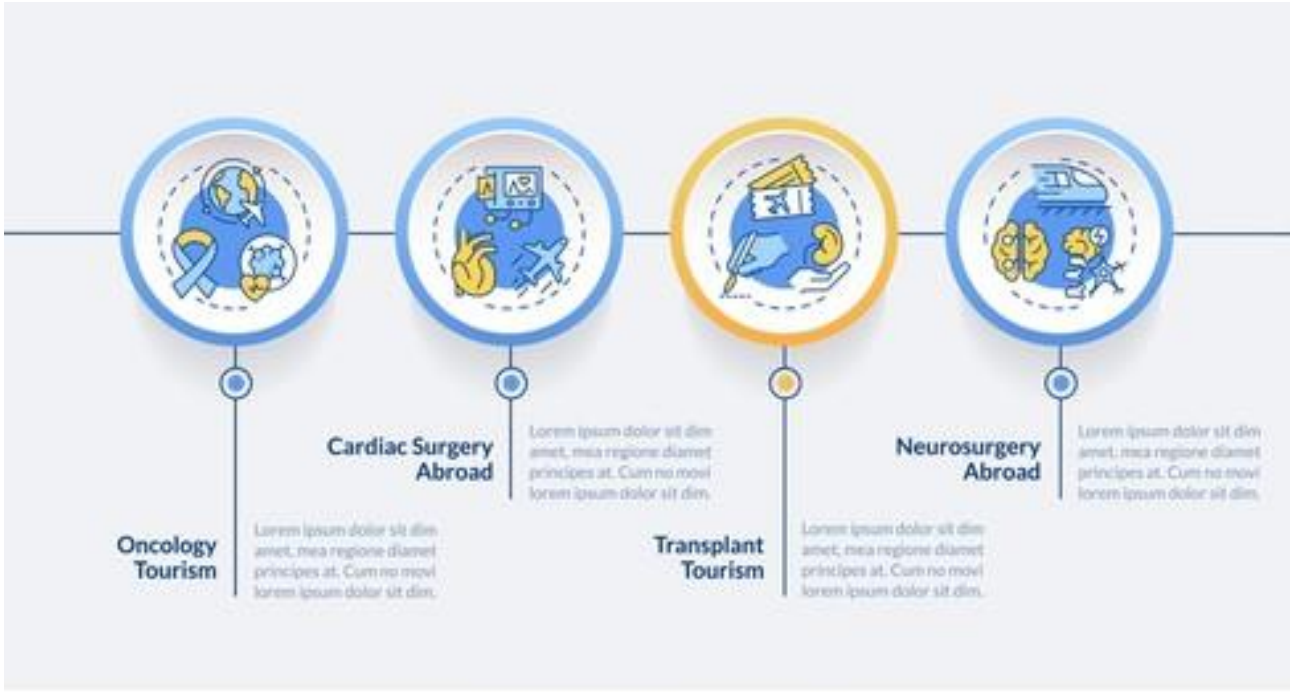
Figure 1. Conceptual framing of Somali outbound medical travel as a health system output shaped by domestic push factors, financing conditions, and destination pull factors.

1.3 Study aim, objectives, and analytical questions

The overall aim of the paper is to provide a clear, policy relevant, and academically structured synthesis of Somali cross border health care seeking across four principal destinations: India, Turkey, Ethiopia, and Egypt.

Objective	Core question	Analytical output
1	How many Somalis travel abroad for care, and which corridors are directly measured?	Destination volume synthesis and data tier classification
2	Which clinical conditions and service gaps most strongly drive outbound care?	Disease profile and destination service mapping

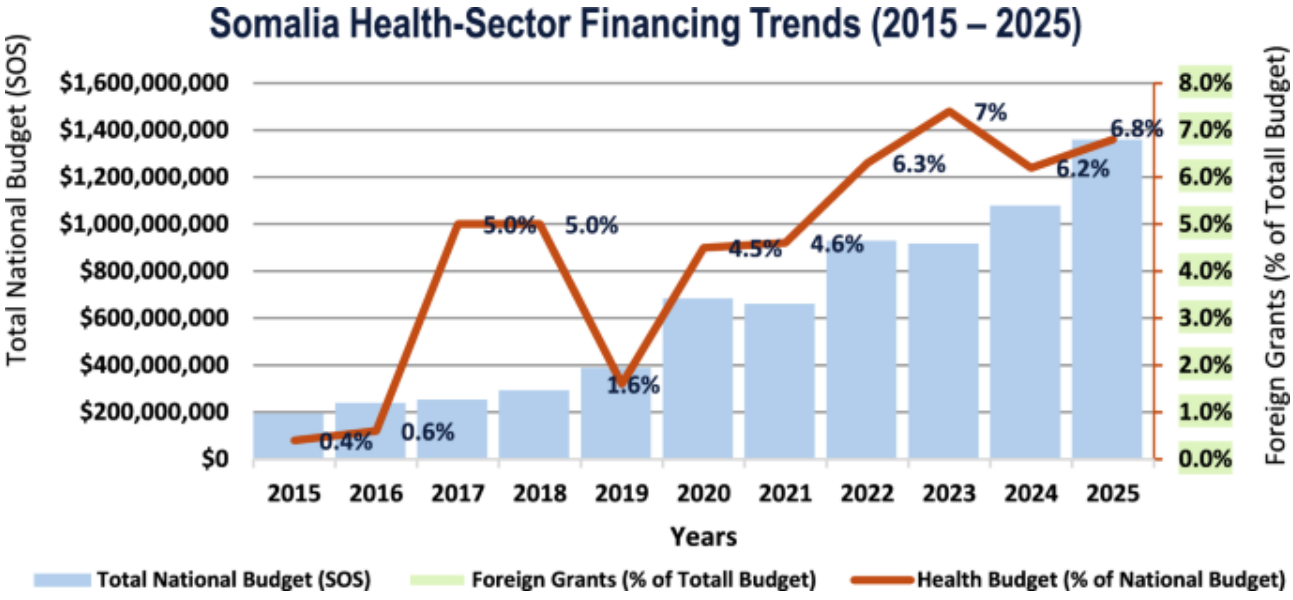
Objective	Core question	Analytical output
3	What can and cannot be said about outcomes, morbidity, failure, and safety?	Outcome proxy table and mechanism based interpretation
4	What financial burden do households and the national economy bear?	Household cost, spending envelope, and macroeconomic leakage analysis
5	Which barriers, risks, and patient rights issues arise in destination countries?	Destination challenge matrix and policy implications



2. Methods

2.1 Design and reporting standard

This paper uses a PRISMA informed rapid evidence synthesis and presents the findings in an extended IMRaD structure. The design was chosen because the available evidence spans official movement statistics, peer reviewed studies, institutional



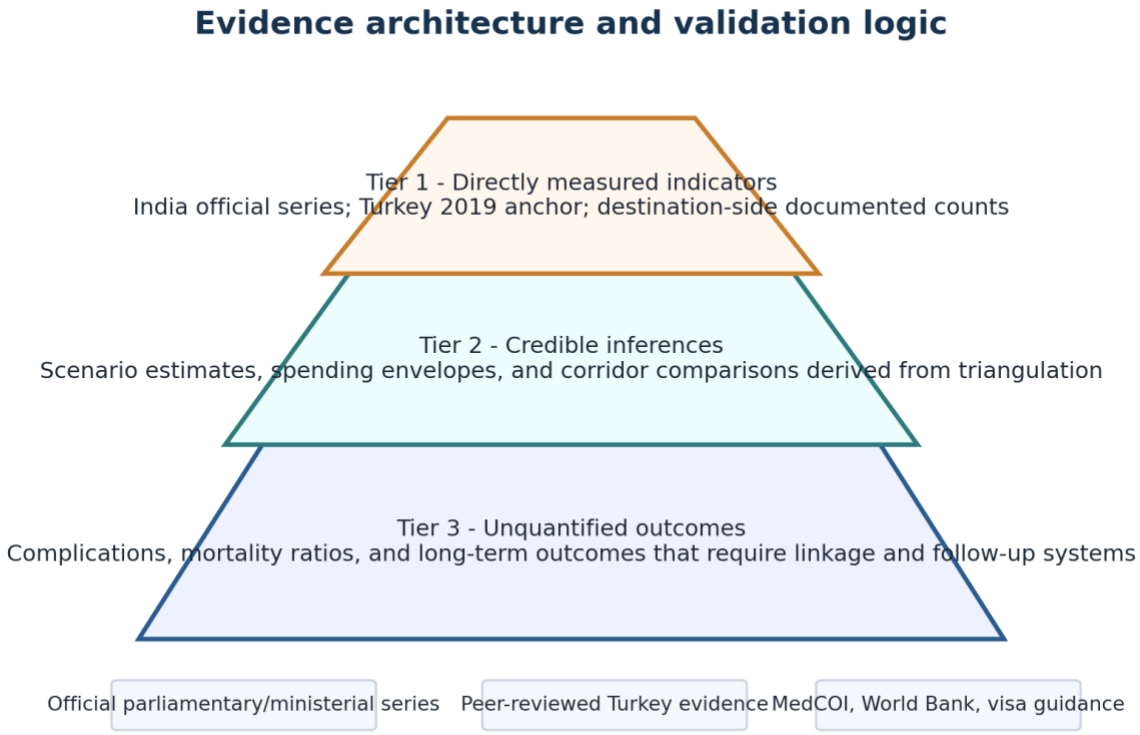
reports, country of origin information syntheses, health financing documents, and medical visa guidance rather than a uniform body of clinical trials or registry datasets.

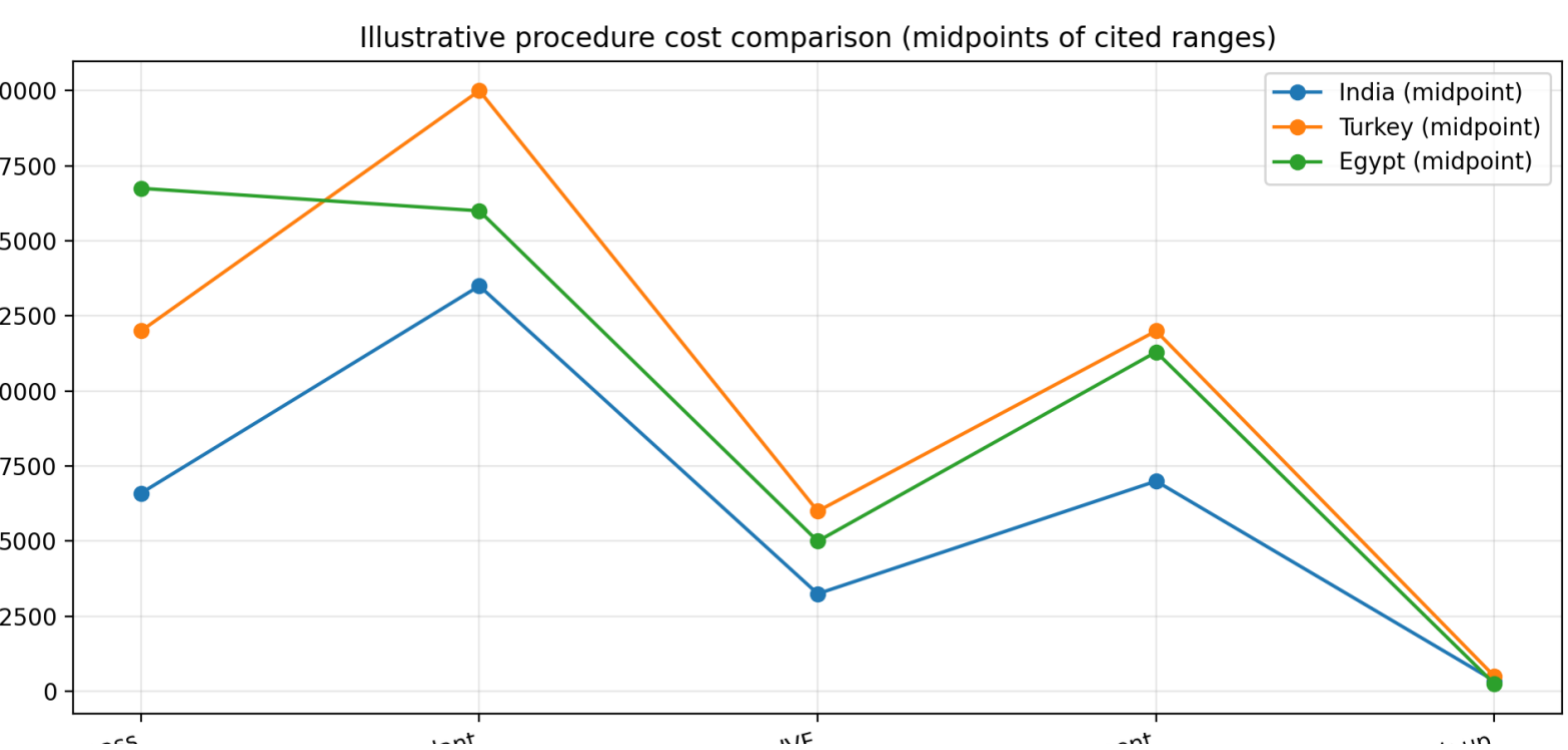
The review was not prospectively registered. However, an internal protocol was applied to define search domains, inclusion boundaries, extraction fields, evidence tier rules, and figure logic. Narrative synthesis was prioritized because the evidence base is heterogeneous in design, denominator, definition, and outcome reporting.

2.2 Analytical framework

The analysis adopts a push pull framework. Domestic push factors include service unavailability, constrained diagnostics, perceived and actual quality deficits, weak continuity for chronic and complex disease, and limited tertiary infrastructure. Destination pull factors include perceived higher quality, shorter waiting times, clearer navigation, cultural familiarity, diaspora networks, and facilitator mediated access.

To preserve analytic integrity, all major statements were assigned to one of three evidence tiers: directly measured, credibly inferred, or currently unquantifiable. This distinction was retained throughout the paper to avoid blurring measured movement data with modeled or interpretive material.





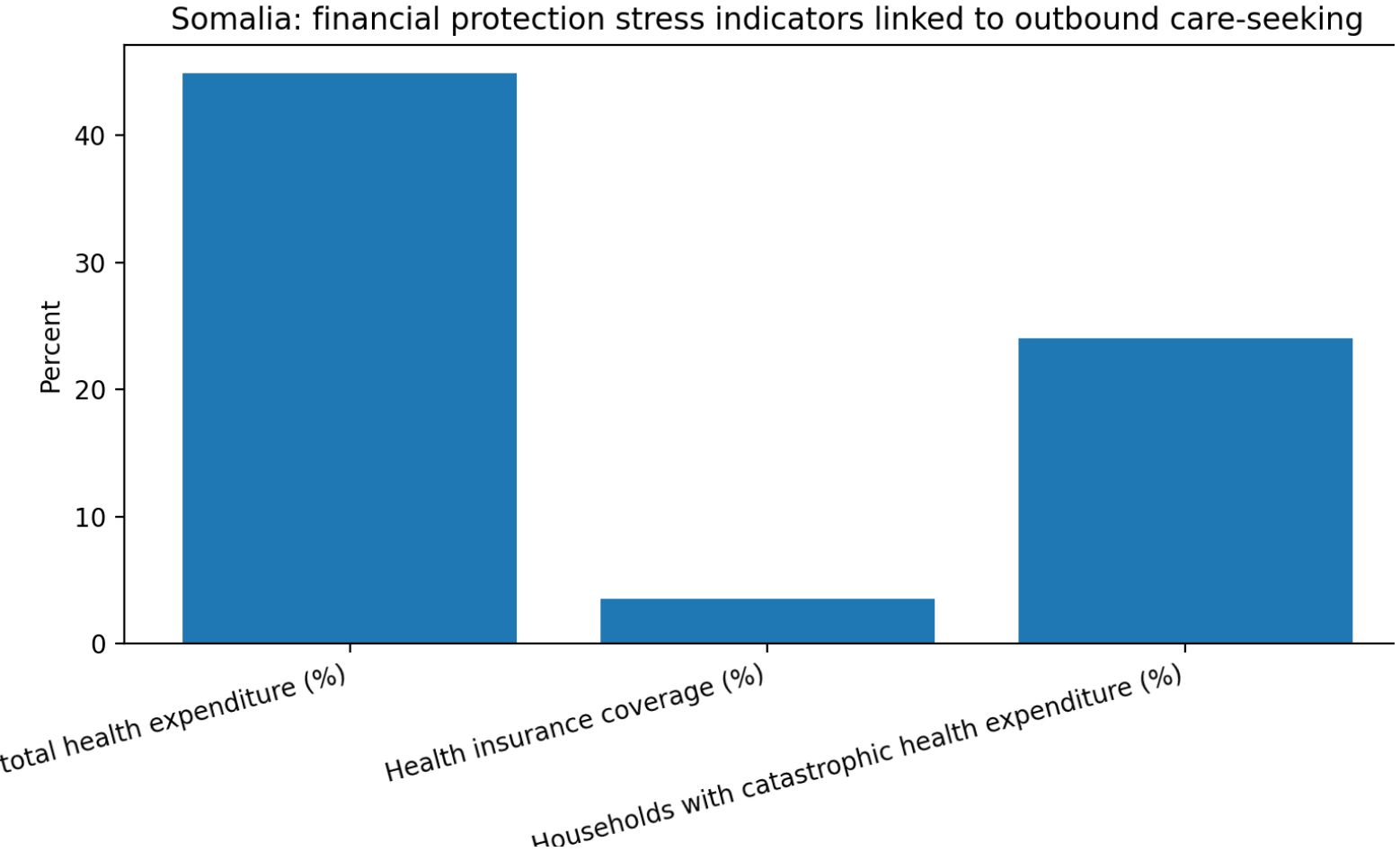


Figure 2. Evidence architecture and validation logic used to distinguish directly measured indicators, credible inferences, and unquantifiable outcome domains

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2.3 Data sources and search logic

Five source pillars anchored the review. First, Government of India parliamentary and ministerial annexes provided nationality specific Somali series for medical purpose arrivals (2015 2017) and medical visas issued (2019 2024). Second, peer reviewed Turkish evidence provided a verified 2019 Somali patient anchor and destination specific service use patterns.

Third, MedCOI and COI materials described service availability, affordability, and concrete domestic care gaps in Mogadishu. Fourth, World Bank documentation contextualized Somalia's low per capita health spending, fragmentation, and out of pocket burden. Fifth, Indian embassy guidance for Somali applicants illuminated documentation, prepayment, and administrative barriers along the treatment pathway.

Structured searching was supplemented by citation chasing and source led retrieval from known official series. Because the user's uploaded materials already consolidated much of the relevant evidence base, the present manuscript was constructed by harmonizing these materials into one coherent analytical narrative rather than by reopening every cited source line by line.

2.4 Eligibility criteria and evidence pillars

Domain	Inclusion criteria	Exclusion criteria
Population	Somali nationals, Somali patient populations, or Somalia relevant cross border referral evidence	Non Somali only populations; migration unrelated to health care
Destinations	India, Turkey, Ethiopia, Egypt, plus Somalia side sources required to explain push factors	Other destinations unless used strictly for context
Time frame	Evidence informing 2014 2026, with strongest quantified series in 2015 2024	Pre 2014 material unless historically necessary

Domain	Inclusion criteria	Exclusion criteria
Evidence type	Official statistics, peer reviewed studies, MedCOI/COI reports, World Bank documents, institutional reports, visa guidance	Pure opinion pieces, promotional content, or unverifiable claims
Outcomes and costs	Any extractable data on volumes, drivers, costs, patient challenges, outcome proxies, and pathway frictions	Claims lacking denominator, source traceability, or definitional clarity

Search Strategy and Selection Process

The search strategy employed a combination of structured queries and targeted source led retrieval, commencing with known official series and subsequently expanding outward through citations. Search strings encompassed combinations of terms such as "Somalia medical travel," "Somali patients India," "Somalia ICU mortality," "Somalia cancer survival," and "Somalia health expenditure." Searches were supplemented by reference list checks of included documents and targeted retrieval of official annexures and embassy guidance documents.

Records underwent screening in two stages: (1) title/abstract or executive summary screening to eliminate irrelevant materials, and (2) full text assessment against eligibility criteria. Evidence was retained even when annual volume estimation was not feasible, provided it contributed to the characterization of drivers, pathways, or barriers.

PRISMA Flow Diagram Narrative

The PRISMA 2020 flow diagram was utilized to summarize the record identification, screening, eligibility assessment, and inclusion processes.

Identification involved database searches and targeted retrieval of official series and institutional documents. After duplicates were removed, records proceeded to screening, where titles, abstracts, or executive summaries were evaluated for relevance

to Somali cross border medical care seeking, the four destinations, and extractable indicators.

Eligibility was determined through full text assessment against PRISMA style criteria, with common exclusion reasons including non Somali only populations, non healthcare mobility, out of scope destinations, cosmetic tourism content, and documents lacking extractable or verifiable data.

The final included set comprised the five evidence pillars and additional peer reviewed and institutional sources meeting eligibility criteria. Due to heterogeneity, the evidence was synthesized narratively. PRISMA counts are provided for the final layout.

2.8 Ethical considerations

This manuscript utilized only publicly available documents and previously compiled materials. No patient-level identifiers were included, no interviews were undertaken for this study, and no interventions were conducted. Consequently, a formal human subject ethics review was not necessary.

Ethical caution was nonetheless necessary in interpretation. Fragile state evidence can tempt exaggerated claims. The paper accordingly avoids inventing morbidity ratios or malpractice rates that cannot be supported by the available evidence.

Data Extraction and Synthesis:

Data extraction followed a standardized template, capturing volume indicators (including year, destination, arrivals versus visas, episodes versus unique individuals), clinical drivers and service gaps (such as oncology, renal, cardiac, and diagnostic constraints), outcome proxies (ICU mortality, cancer survival rates, satisfaction indicators, concerns regarding errors or waiting times), economic burden variables (procedure costs, household financing mechanisms, out of pocket expenditures, catastrophic spending markers, macroeconomic capital outflows), and pathway frictions (documentation requirements, integrity controls, advance payment protocols, reliance on intermediaries, and risks to post return continuity of care).

The extracted domains were aligned with those specified in the supporting systematic review methodology. Evidence was synthesized through narrative and comparative approaches, utilizing triangulation to identify consistent themes and contradictions across primary data sources.

Explicit attention was given to evidentiary gaps particularly in Ethiopia and Egypt where robust, nationality specific data on volume series was not available.

Risk of Bias and Source Credibility Appraisal

Given the absence of a universal risk of bias assessment tool, the heterogeneous evidence base including official statistics, peer reviewed literature, COI/MedCOI reports, and grey literature was evaluated for provenance (distinguishing between official, secondary, and anecdotal sources), definitional clarity (differentiating between arrivals and visas, and definitions of "medical tourist"), temporal specificity (assessment of year coverage and identification of missing periods), and replicability (availability of traceable tables, annexes, and citations).

This comprehensive approach ensured rigorous appraisal of each evidence pillar's credibility and reliability

Data Analysis Mechanisms: Harmonization, Evidence Tier Labeling, Gap Treatment, and Outcome Interpretation

To resolve discrepancies in indicator definitions and variations in reporting across countries, the analysis utilized five principal mechanisms:

Harmonization of indicators, with all movement metrics standardized as episodes (entries or visas) rather than unique individuals, while maintaining transparency regarding definitional differences.

Tiered evidence labeling, where analytic statements are categorized as measured, inferred, or unquantified.

Addressing data gaps through scenario-based extrapolations for years and destinations lacking complete records, prioritizing measured series wherever possible.

Cost estimation utilizing conservative benchmarks, with uncertainty represented as value ranges.

Mechanism-driven interpretation of outcomes, concentrating on consistently evidenced failure mechanisms including late presentation, diagnostic imprecision, financing delays, intermediary dependence, and post-return discontinuity ensuring conclusions accurately reflect the realities substantiated by the underlying data.

Limitations:

Imperfect proxies for care episodes: The primary quantitative series from India relies on official arrivals and visa indicators rather than linked clinical utilization data. Arrivals do not directly correspond to visas issued; visas may go unused, and the counts typically represent episodes instead of distinct individuals, particularly for chronic conditions requiring multiple visits.

Gaps and definitional discontinuities: India's official tables have a missing year (2018), and the two Indian data series (arrivals vs visas) are not completely interoperable due to definitional differences.

Destination asymmetry and evidence gaps: Turkey provides a validated point estimate for Somali patients in 2019, but annual Somali totals remain unavailable for the decade, while Ethiopia and Egypt lack comprehensive, publicly reported

nationality-specific series across the same period, impeding the development of robust volume trend analyses.

Outcome measurement constraints: Aggregate morbidity, complication rates, and mortality ratios for Somali outbound patients cannot be reliably derived from public sources without both a Somalia-side outbound referral registry and destination-side outcome linkage. Outcomes must therefore be interpreted through proxies and mechanism-based approaches rather than pooled rates.

Heterogeneity precluding meta-analysis: Evidence includes government statistics, COI/MedCOI syntheses, peer-reviewed studies, and grey literature. Findings were synthesized narratively, and source credibility was assessed by provenance and definitional clarity instead of a single formal appraisal tool.

End period incompleteness (2025 2026): Complete annual statistics for 2025 and 2026 are not consistently available; conclusions for these years are chiefly interpretive and rely on scenario analysis.

Publication and reporting bias risk: Evidence may be more readily published or accessible where medical tourism sectors are more developed, or where English-language reporting prevails, potentially underrepresenting non-English local reports and informal corridor dynamics.

This study offers a comprehensive scientific evaluation of Somali outbound medical travel from 2014 to 2026. It systematically investigates travel volumes, destination trends, clinical motivations, economic consequences, patient challenges, and informational deficits, utilizing an advanced methodological framework that synthesizes official statistics, peer-reviewed research, and scenario-based modeling.

The primary objective is to inform health policy researchers and academic audiences by elucidating the complex factors influencing cross-border medical care for Somali patients.

3. Results

Measurement Status Table

A comprehensive quantitative and interpretive synthesis is conducted on Somali outbound medical travel across the major corridors: India, Turkey, Ethiopia, and Egypt. The analysis leverages official series, peer reviewed anchors, and scenario modeling to address persistent

data gaps and facilitate a nuanced understanding of temporal trends, destination preferences, and comparative flows.

Corridor	Measured Data	Data Gaps (2014 2026)
Somalia → India	Official series (2015 2017 arrivals; 2019 2024 medical visas)	2014, 2018 missing; 2025 2026 projections
Somalia → Turkey	2019 anchor (2,742; 0.4% share, peer reviewed)	No Somalia by year public series for 2014 2018, 2020 2026
Somalia → Ethiopia	Presence/qualitative pathways	No robust Somalia by year public series
Somalia → Egypt	Presence/qualitative pathways; strong demand signals	No robust Somalia by year public series

Phase I. Measurement architecture and destination volumes

The results show that Somali outbound medical travel behaves less like discretionary travel and more like a privately financed parallel tertiary care system. Measurement asymmetry across corridors is one of the central findings. India is directly measurable; Turkey is partially measurable through a validated 2019 anchor; Ethiopia and Egypt are substantively important but weakly quantified in nationality specific public time series.

1 India Corridor: Official Series, Trend Interpretation, and Post Pandemic Dynamics

India represents the most systematically quantified destination for Somali medical travelers. Official data, derived from parliamentary annexures and government tables, document medical purpose arrivals and medical visa issuances. These figures represent discrete travel episodes rather than unique individuals. The dataset, summarized below, contains gaps for certain years (2014, 2018) and relies on projections for 2025 2026.

Year	Somalia Count	Indicator
2015	3,072	Medical purpose arrivals (FTAs)
2016	5,549	Medical purpose arrivals (FTAs)
2017	4,964	Medical purpose arrivals (FTAs)
2018		Not found in accessible official tables (gap)
2019	3,454	Medical visas issued
2020	1,386	Medical visas issued
2021	4,162	Medical visas issued
2022	10,206	Medical visas issued
2023	16,411	Medical visas issued
2024	12,261	Medical visas issued

Cumulatively, the minimum volume captured (excluding the 2018 gap) is 61,465 episodes across 2015 2017 and 2019 2024. The data reveal a pronounced post pandemic surge in 2022 2024, likely attributable to pent up demand, intensified domestic tertiary care shortages, and accumulated unmet clinical needs.

1.2 Turkey Corridor: Peer Reviewed Anchors and Contextual Modeling

For Turkey, the principal quantitative anchor is a peer reviewed study reporting 2,742 Somali medical travelers in 2019 representing 0.4% of Turkey's total medical tourism intake based on Ministry of Health/IHSAC data. The absence of a year by year Somali

series necessitates contextual modeling using Turkey's overall inbound health tourism data:

Year	Value
2014	414,658
2015	360,180
2016	377,384
2017	433,292
2018	551,748
2019	756,926
2020	435,691
2021	729,592
2022	1,381,807
2023	1,538,643
2024	1,506,442
2025	1,398,580

Projections are employed for 2026, as official Turkish figures are not yet available. This inferential approach situates the Somali corridor within a broader regional context, albeit with recognized methodological limitations.

1.3 Ethiopia and Egypt Corridors: Qualitative Evidence and Quantification Gaps

Despite recurrent qualitative evidence of substantial Somali patient flows to Ethiopia and Egypt, systematic nationality specific annual data are absent. This quantification gap restricts the precision of comparative analyses. Nevertheless, demand signals are robust: for example, an Egyptian medical convoy in Mogadishu in September 2024 examined 1,674 Somali patients and performed 436 surgeries, underscoring the magnitude of unmet clinical need driving outbound travel.

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India remains the only corridor with a decade window official Somali series. Across 2015 2017 and 2019 2024, the minimum captured volume is 61,465 episodes, excluding the 2018 gap.

The post pandemic period shows a steep increase, particularly in 2022 2024. Turkey's verified 2019 Somali count of 2,742 confirms significant corridor use, but no comparable series was identified for the full period. Ethiopia and Egypt remain evidence gap corridors with clear demand signals but without validated longitudinal Somali specific volume series.

Year	Somali count	Indicator
2015	3,072	Medical purpose arrivals (FTAs)
2016	5,549	Medical purpose arrivals (FTAs)
2017	4,964	Medical purpose arrivals (FTAs)
2018	Not available	Official gap in accessible tables
2019	3,454	Medical visas issued
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2021	4,162	Medical visas issued
2022	10,206	Medical visas issued
2023	16,411	Medical visas issued

Year	Somali count	Indicator
2024	12,261	Medical visas issued

Table 3. India corridor official nationality specific indicators for Somali medical travel. Values represent movement episodes rather than unique individuals.

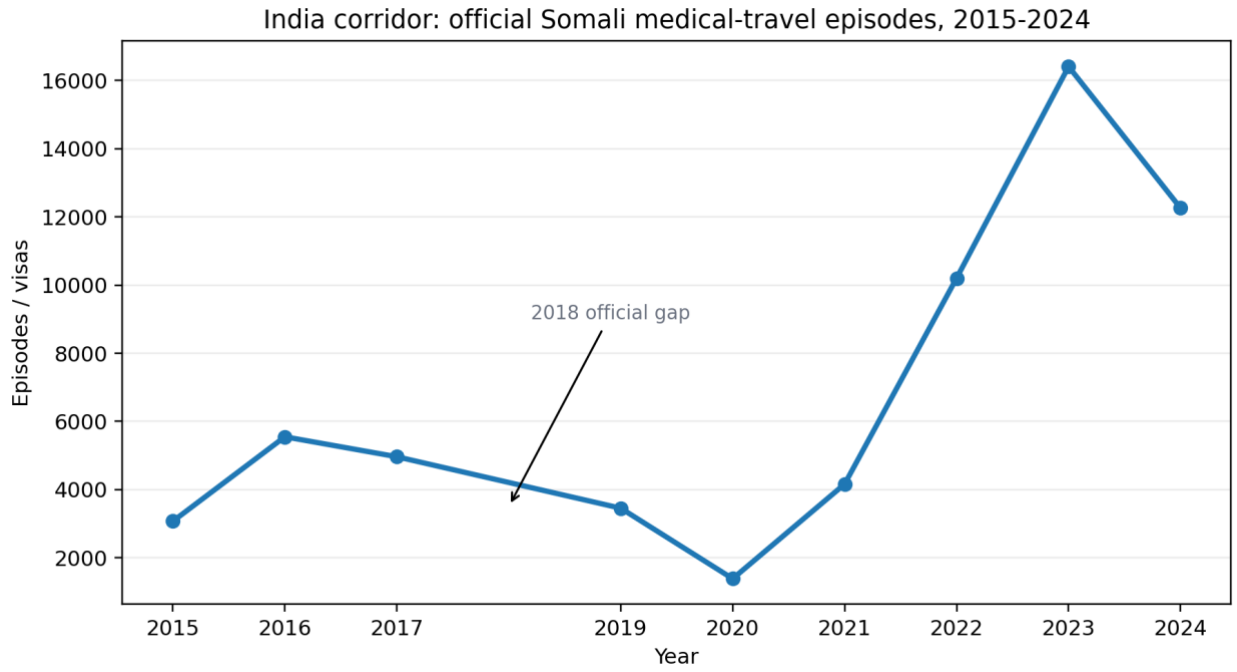


Figure 3. India corridor: official Somali medical travel episodes, 2015 2024. The visible post pandemic surge is a measured finding, while the 2018 gap remains unresolved in the accessible official series.

Two interpretation cautions are essential. First, arrivals and visas issued are not identical measures. Second, these figures represent episodes rather than persons, meaning that repeat travel by the same patient may be counted more than once.

Phase II. Destination specific service demand and disease profiles

Across the uploaded evidence, outbound demand is concentrated in continuity dependent and technology intensive service lines. Non communicable diseases dominate the complex care burden, with reported prevalence ranges including hypertension at 26 33 percent, diabetes at 11 20 percent, cardiovascular risk at 24 38 percent, chronic kidney disease at 29.4 percent, and acute kidney injury at 14.8 percent.

Oncology emerges as a particularly strong driver. Esophageal cancer accounts for 32.3 percent of recorded malignancies in hospital based studies, while domestic limitations

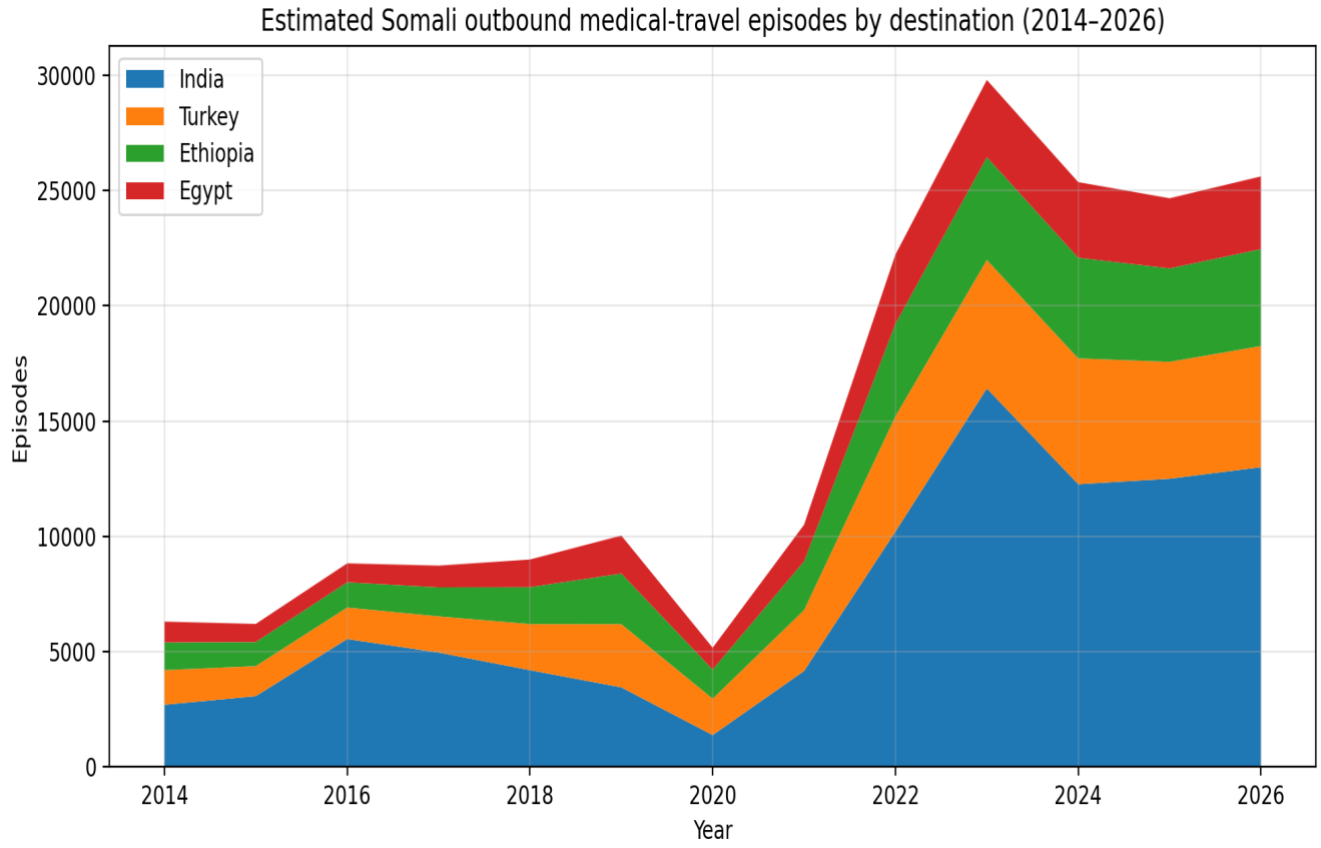
include restricted chemotherapy availability, lack of comprehensive radiotherapy, limited advanced imaging, and no mature national cancer registry. Cardiovascular and renal conditions similarly generate travel because they depend on diagnostics, procedural infrastructure, and longitudinal management that remain unreliable or incomplete in country.

Destination profiles are not identical. India is repeatedly associated with high acuity tertiary interventions, especially oncology, cardiac care, renal care, complex diagnostics, and transplant related pathways.

Turkey shows a distinct service mix in which IVF, urology, and orthopedics are prominent. Ethiopia functions as a regional stabilization corridor, particularly where overland or shorter distance access matters. Egypt combines proximity with demand for cardiology, oncology, and other specialist services, although the public Somali specific quantitative record remains sparse.

These differentiated destination patterns reflect the interplay of local capacity, patient acuity, and service accessibility. While India addresses complex, high-intensity needs such as oncology, cardiac, and transplant care, Turkey's offerings cater to reproductive medicine and surgical specialties, filling gaps in IVF and orthopedics. Ethiopia serves as a logistical bridge for those requiring stabilization or easier cross-border transit, whereas Egypt’s proximity and specialist options supplement demand for advanced cardiology and oncology interventions.

The resulting flows underscore the importance of matching patient-specific requirements with regional strengths, highlighting the ongoing challenge of developing comprehensive, in-country capabilities to reduce outbound dependence.



Condition / service line	Indicative burden or signal	Principal destination(s)	Core reason for travel
Oncology / cancer care	Esophageal cancer 32.3% of recorded malignancies	India, Ethiopia, Egypt	Advanced imaging, chemotherapy, radiotherapy, staging, surgery
Cardiovascular disease	Hypertension 26 33%; complex cardiac complications	India, Egypt	Bypass surgery, valve procedures, higher level diagnostics
Renal disease	CKD 29.4%; renal failure reported as major hospitalization burden	India, Turkey	Dialysis constraints, transplant readiness, specialist nephrology
Reproductive medicine	High demand signal in Turkey evidence	Turkey	IVF and culturally acceptable fertility services

Condition / service line	Indicative burden or signal	Principal destination(s)	Core reason for travel
Orthopedics / urology	Prominent among Somali patients in Turkey	Turkey, India	Elective but high value specialty procedures and rehabilitation

Table 4. Destination specific service demand and disease profiles synthesized from the uploaded evidence base.

Phase III. Outcomes, morbidity proxies, and failure mechanisms

The current public evidence does not support a defensible pooled morbidity rate, complication rate, or mortality ratio for Somali patients treated abroad. The reason is structural rather than incidental: the main quantitative datasets are visa and arrival indicators, not linked clinical outcome registries, and Somalia lacks an outbound referral registry with post return follow up.

What the evidence does support is a mechanism based outcome interpretation. Domestic severity is high, with ICU mortality proxies reported at 38.6 percent in the general intensive care unit, 35.9 percent in the emergency intensive care unit, and 25.5 percent for internal medicine admissions, with an ICU odds ratio of 10.4 in one referenced context. These are not outbound mortality values, but they help explain why travel is often perceived as the last viable option.

Failure tends to occur through recurrent pathway mechanisms: terminal stage referral after long diagnostic delay; unnecessary referral caused by diagnostic uncertainty or mistrust; financial exhaustion leading to interrupted treatment; intermediary mediated coordination risks; and continuity failure after return.

In other words, a successful procedure abroad can still generate poor long term value if medicines, wound care, monitoring, or specialist review are not sustained once the patient is back in Somalia.

Domain	Evidence status	Key interpretation
Pooled outbound morbidity / mortality	Not directly measurable	No registry linkage between travel episode, treatment received, and outcome after return

Domain	Evidence status	Key interpretation
Domestic severity context	Measured proxy	High ICU and internal medicine mortality proxies support late presentation logic
Treatment failure	Credible mechanism	Late referral, interrupted financing, and continuity breakdown recur across materials
Malpractice related exposure	Partly suggested, not quantifiable	Recurring errors, diagnostic concerns, opaque facilitator practices, and misinformation risks are documented, but no robust malpractice rate can be estimated
Patient experience	Partly measurable	Turkey evidence suggests overall satisfaction alongside clear negative experience signals

Table 5. Outcomes, morbidity proxies, and failure mechanisms. The table distinguishes directly measurable outcome domains from mechanism based interpretation.

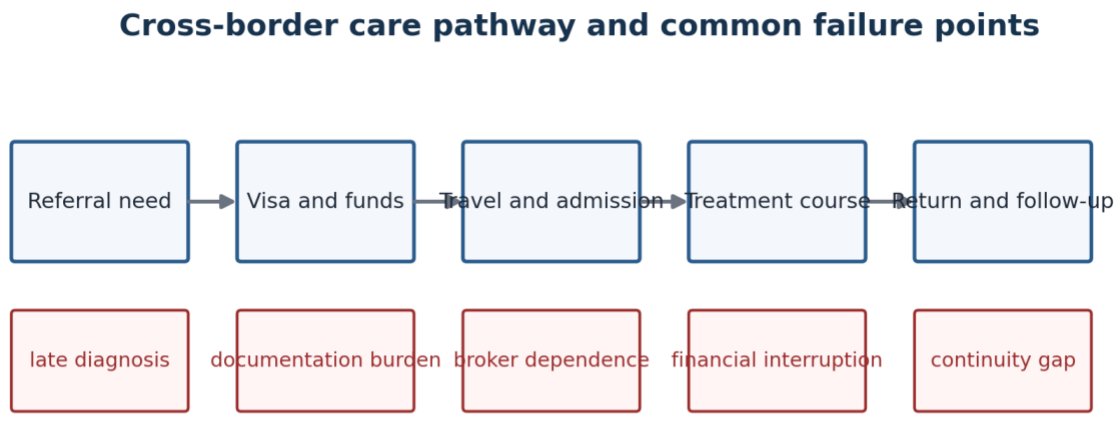


Figure 6. Cross border care pathway and common failure points. The sequence highlights where clinical need can be converted into avoidable harm through delay, documentation, broker dependence, financial interruption, or weak follow up.

Phase IV. Economic burden and cost analysis

The household burden of outbound medical care is substantial. The mean direct cost per episode is estimated at US$8,543, comprising US$5,983 for procedures, US$1,995 for accommodation, US$1,291 for travel, and US$398 for visa and administrative costs. These values are averages, not ceilings; the uploaded materials also report financial extremes approaching US$80,000 for complex cases, with accommodation alone reaching US$30,000 during prolonged stays.

Outbound medical travel exerts substantial economic burdens at the household and national levels, with significant implications for health financing and macroeconomic stability.

4.1 Household Direct Costs

A SIDRA survey in Puntland provides a detailed breakdown of mean direct costs per outbound episode:

Component	Mean Cost (US$)
Medical procedures	5,983
Accommodation	1,995
Travel	1,291
Visa/admin	398
Total	8,543+

Cost extremes are notable, with maximum out of pocket totals approaching $80,000 for complex cases and accommodation costs reaching up to $30,000 for prolonged stays. Insurance coverage is minimal (~3.5%), and financing is predominantly sourced from family, diaspora, and community support (43%), current income (20%), life savings (17%), and asset liquidation (5%).

4.2 Procedure Level Cost Comparisons

Procedure	India	Turkey	Egypt
Heart bypass	5,200 8,000	9,000 15,000 +	7,500 26,000
Kidney transplant	12,000 15,000	18,000 22,000	16,000

These comparative cost ranges illustrate the economic calculus underlying destination selection, particularly under catastrophic health expenditure risk.

4.3 National Spending Envelopes and Macroeconomic Impact

Applying India's international patient value parameters (US$7,143 8,571 per episode) to the Somali official series yields the following indicative national expenditures:

- 2022: ~US$73 87 million
- 2023: ~US$117 141 million
- 2024: ~US$88 105 million

Cumulative implied spending to India from 2015 2017 and 2019 2024 (excluding 2018) is estimated at US$439 527 million. Annual outbound health expenditure for all corridors consistently exceeds $100 million, with the 2024 scenario based estimate at $219 million representing approximately 1.8% of Somalia's GDP (projected at $12.11 billion in 2024). This sustained outflow constitutes a significant macroeconomic leakage and opportunity cost.

Parameter	Value
India's international patient value parameters (per episode)	US$7,143 8,571
Somalia national expenditure 2022	~US$73 87 million
Somalia national expenditure 2023	~US$117 141 million
Somalia national expenditure 2024	~US$88 105 million
Cumulative spending to India (2015 2017, 2019 2024, excl. 2018)	US$439 527 million
Annual outbound health expenditure (all corridors)	exceeds $100 million
2024 scenario based estimate	$219 million
2024 outbound health expenditure as % of Somalia's GDP	1.8%
Somalia's projected GDP (2024)	$12.11 billion

4.4 Scenario Based National Burden Estimates

Year	Total Outbound Episodes (Scenario)	Total Spend (US$M, Scenario)
2014	6,305	54.6
2016	8,830	76.1
2019	10,035	87.1
2020	5,173	45.0
2023	29,788	257.2
2024	25,358	219.3
2026	25,607	221.4

Financing is heavily socialized downward onto households and kinship networks. Insurance coverage is described as approximately 3.5 percent, while 43 percent of financing derives from family, diaspora, or community support; 20 percent from current income; 17 percent from life savings; and 5 percent from asset liquidation. The pattern is revealing: the system often rations tertiary care not by triage queue, but by a family's ability to mobilize cash quickly.

At macroeconomic level, the burden is also consequential. Applying India's reported medical value travel benchmark of approximately US$7,143 US$8,571 per international patient to the Somali India series yields indicative spending envelopes of roughly US$73 87 million in 2022, US$117 141 million in 2023, and US$88 105 million in 2024. In the central four corridor scenario used for planning visualization, 2024 total outbound spending reaches approximately US$219.3 million, equivalent to roughly 1.8 percent of a US$12.11 billion Somali GDP.

Cost component / financing channel	Value	Interpretation
Medical procedures	US$5,983	Largest direct household cost component
Accommodation	US$1,995	Long stays make non medical costs substantial

Travel	US$1,291	Cross border mobility cost before treatment begins
Visa / administration	US$398	Understates broader documentation and transaction burden
Mean total per episode	US$8,543+	Average burden already catastrophic for many households
Family / diaspora / community support	43%	Social capital functions as informal insurance
Current income	20%	Liquidity from wages or active business income
Life savings	17%	Depletion of accumulated reserves
Asset liquidation	5%	Distress financing through sale of productive assets

Table 6. Household direct cost per outbound episode and selected financing profile indicators.

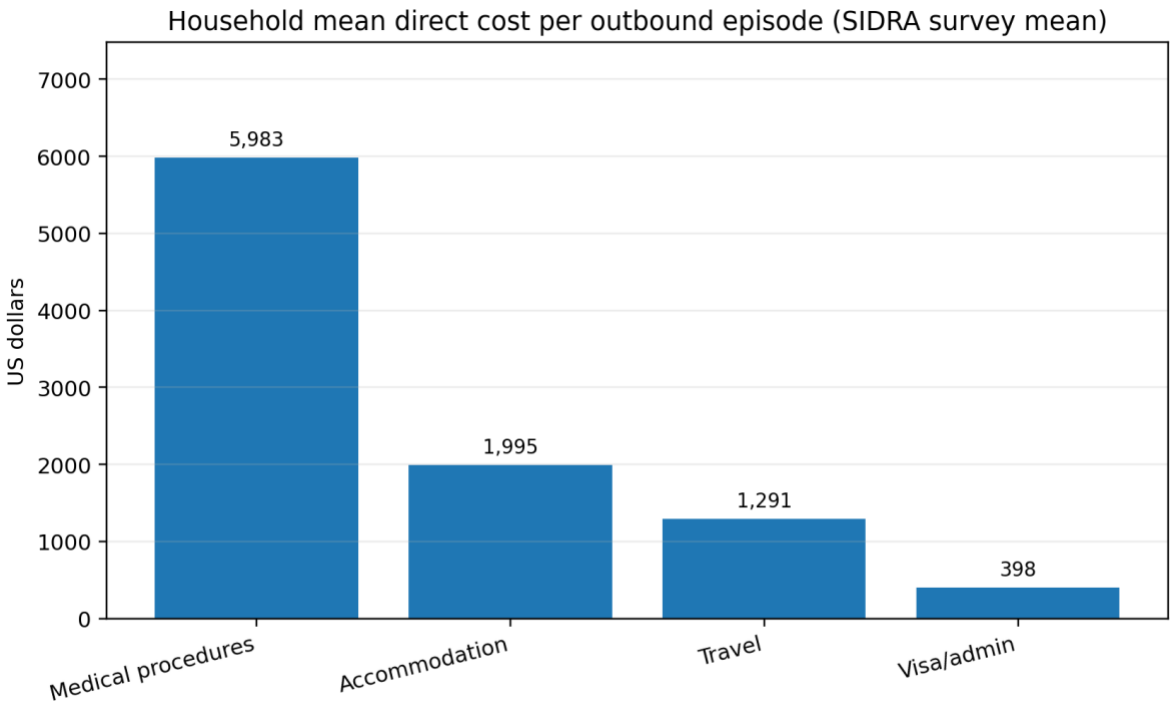


Figure 4. Household mean direct cost per outbound episode (SIDRA survey mean). Procedure fees dominate, but accommodation and travel remain large enough to destabilize treatment completion.

Procedure	India (US$)	Turkey (US$)	Egypt (US$)
Heart bypass	5,200 8,000	9,000 15,000+	7,500 26,000
Kidney transplant	12,000 15,000	18,000 22,000	16,000
Hip replacement	7,000	12,000+	11,300
IVF treatment	3,250	6,000+	5,000

Table 7. Illustrative procedure cost ranges by destination, showing why destination choice is also an economic decision under catastrophic risk.

Year	Outbound episodes (scenario)	Estimated spend (US$ millions)
2014	6,305	54.6
2016	8,830	76.1
2019	10,035	87.1
2020	5,173	45.0
2023	29,788	257.2
2024	25,358	219.3
2026	25,607	221.4

Table 8. Selected year national burden envelope used for planning visualization. India measured points are embedded where available; Ethiopia and Egypt remain scenario based due to data gaps.

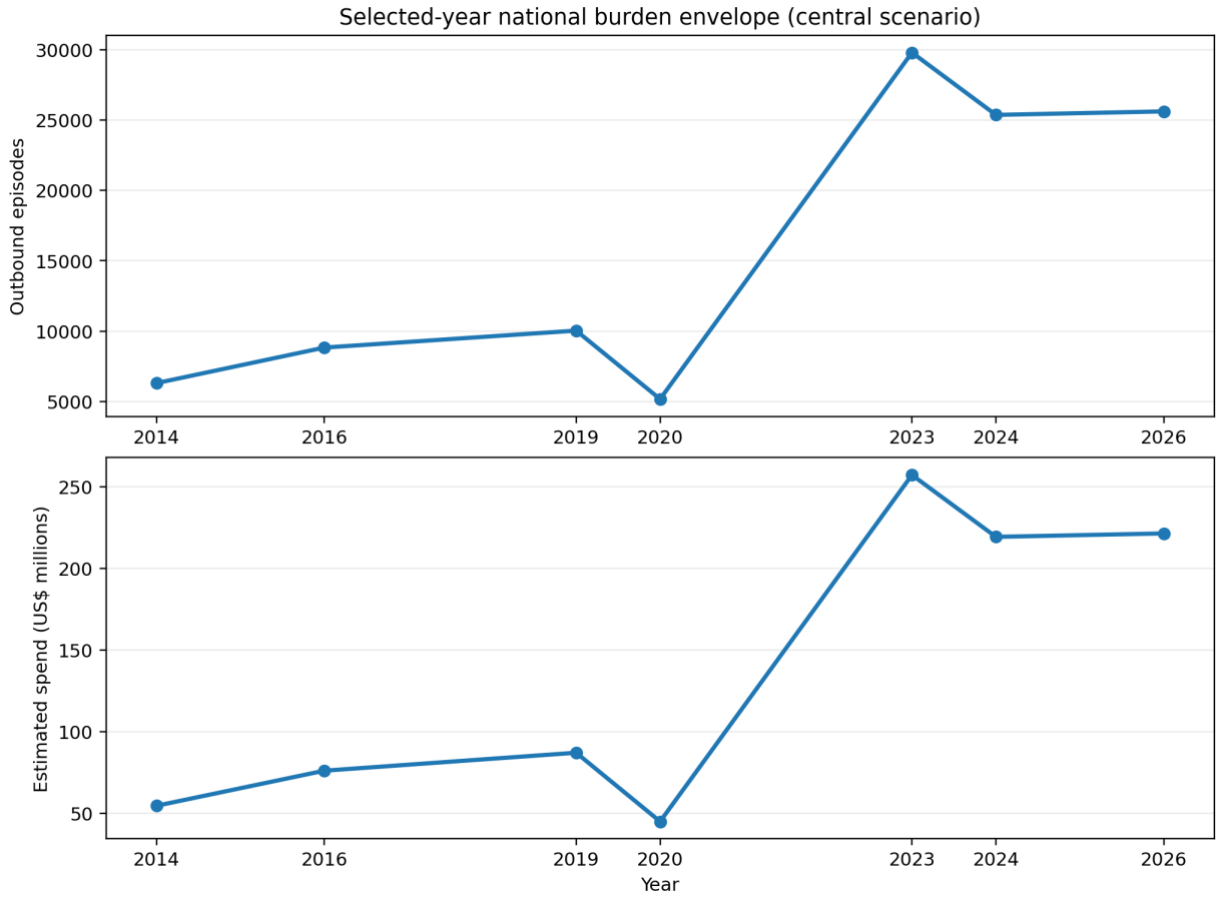


Figure 5. Selected year national burden envelope (central scenario). Values illustrate scale and policy relevance rather than audited expenditure.

Phase V. Patient challenges in destination countries

Patient challenges are destination specific but structurally related. In India, the pathway is shaped by documentation burdens, bank statement requirements, referral letters, visa fees, and reported token prepayment requirements of approximately 25 percent of estimated treatment cost before visa review. These controls may reduce misuse, but they also magnify inequity and delay.

In Turkey, patients often utilize intermediaries for healthcare access. Studies indicate that many Somali patients are generally satisfied and would consider Turkish services again; however, the same data report negative experiences related to recurrent errors (32.6 percent), extended waiting times (16 percent), elevated costs (15.4 percent), insufficient equipment (10.7 percent), and diagnostic concerns (8 percent). These figures are significant and reflect a clinical and administrative environment that, while preferable to domestic scarcity for certain individuals, is not without considerable challenges.

In Egypt, available research highlights financial and social vulnerabilities experienced during prolonged treatments. Regarding Ethiopia, there is a clear gap in quantitative data on Somali specific corridor volumes, although qualitative evidence acknowledges Ethiopia's role as a regional proximity corridor. Across all destinations, persistent issues such as affordability shocks, coordination failures, and insufficient post return continuity continue to challenge the system.

Destination	Main challenge	Patient consequence	Evidence strength
India	Visa logistics, documentation burden, token prepayment, external processing sites	Delays, exclusion of poorer households, administrative friction before treatment	Strong
Turkey	Heavy intermediary use; waiting time; recurring errors; cost and diagnostic concerns	Variable care navigation, incomplete trust, potential coordination failures	Moderate
Egypt	Social vulnerability during prolonged treatment; financial insecurity	Adherence risk, psychosocial stress, prolonged household burden	Moderate
Ethiopia	Sparse Somali specific quantified evidence; likely navigation and financing constraints	Measurement gap limits precision; proximity may still preserve access for urgent cases	Weak to moderate

Table 9. Patient challenges in destination countries. "Evidence strength" refers to the relative clarity of the uploaded evidence base, not to severity of patient burden.

Economic Impacts and Financial Burden

The economic dimension of medical tourism is arguably the most regressive aspect of the Somali health landscape, characterized by individual hardship and a massive macro fiscal capital leakage.

The Domestic Health Financing Crisis (2014 2016)

During the mid 2010s, Somalia's health financing was among the most fragile in the world. Out of pocket (OOP) payments accounted for 44.9% of total health expenditures, vastly higher than the Sub Saharan African average of 35.7% and the global average of 18.6%.

Health Financing Indicator	Value (Circa 2014 2016)	Contextual Comparison
Real Per Capita Health Spend	~$11 $13	Exceptionally low base
OOP as % of Total Health Exp.	44.9%	Regressive financing
Government Health Budget %	~2.0%	Far below 15% Abuja target
Insurance Coverage Rate	3.5%	Minimal financial protection
External Aid Dependence	~40.0%	High donor reliance

In this environment, even a minor health shock can push a family into poverty. Approximately 24% of Somali households incur medical expenses that exceed 10% of their annual income, and in 2016, 0.15% of the population was pushed below the median consumption poverty line solely due to health expenditures.

Macro Level Capital Leakage

The "silent drain" on the Somali economy is the substantial outflow of foreign currency to support the health sectors of India, Turkey, and Egypt. Experts estimate that Somali citizens collectively spend over $100 million annually on medical treatment abroad. To contextualize the 2015 2016 period, order of magnitude estimates can be derived using India's medical value travel market parameters. In 2019, India's MVT market was valued at $5 6 billion with 700,000 international patients, implying an average per patient package of $7,143 to $8,571.

Applying this benchmark to the official Somali arrival counts for 2015 and 2016 yields indicative spending envelopes:

Year	Somali Arrivals (India)	Indicative Spend (Low Est)	Indicative Spend (High Est)

2015	3,072	$21,944,296	$26,330,112
2016	5,549	$39,636,507	$47,560,479

This implies that by 2016, Somali households were already exporting nearly $50 million annually to the Indian healthcare market alone. Relative to Somalia's domestic health financing where government spending was less than 0.2% of GDP the scale of this outbound spending represents a material share of national health expenditure that could have otherwise bolstered domestic tertiary capacity.

Micro Level Economic Hardships and Coping Strategies

The direct medical cost of a procedure is often only a fraction of the total economic burden. Families must also cover airfare, accommodation, visa fees ($83 for India), and the commissions of facilitators. In 2016, overland routes through Sudan to Egypt could cost between $4,000 and $6,000 for transport alone. To afford these astronomical sums, families frequently resort to "Asset Stripping," which includes:

1. Livestock Liquidation: Pastoralists sell essential breeding stock, undermining their long term economic resilience.
2. Land and Property Sales: Urban families sell residential plots or family land to finance urgent surgeries in India or Turkey.
3. Diaspora Remittance Mobilization: Families enter into deep debt cycles, relying on the diaspora network to provide the liquidity required for upfront "token payments" (often 25% of estimated treatment cost) demanded by some destination hospitals.

Destination Specific Analysis of Patient Challenges

The Somali patient's journey is fraught with logistical and social challenges that vary by destination hub, adding layers of stress to the clinical experience.

India: Administrative and Financial Barriers

As the primary high volume destination, India presents the most rigorous administrative hurdles. Due to the closure of the Indian Mission in Somalia, visa services are handled through Nairobi or Addis Ababa, requiring patients to navigate multiple cross border

transits just to apply. Required documentation is extensive, including bank statements sufficient to cover medical and overhead costs, non criminal record certificates, and referral letters. New integrity controls introduced since 2023 have further restricted patient flexibility, prescribing specific treatment locations and demanding advance token payments that differentially exclude lower income households.

Turkey: The Broker Economy and Error Rates:

While Turkey offers cultural proximity, it is characterized by a high reliance on intermediary organizations for travel arrangements. Over half of Somali patients use these brokers, creating a market vulnerable to exploitation and misinformation. Satisfaction levels are generally high (averaging 3.30 out of 5), yet 32.6% of Somali patients in one study reported negative experiences due to "recurring errors," long waiting times (16%), and diagnostic concerns (8%). These findings imply that the "medical tourism" experience is not uniformly positive and is heavily influenced by the quality of coordination across language and system boundaries.

Ethiopia and Egypt: Regional Accessibility vs. Social Vulnerability

Ethiopia remains a vital "safety valve" for the northern and central regions, yet it faces its own internal infrastructure challenges, with oncology mortality rates at Tikur Anbessa remaining high at 36%. In Egypt, Somali patients are often integrated into public health programs rather than high end private hospitals, exposing them to financial insecurity, housing instability, and the stigma of being a "refugee" or foreign patient during prolonged treatment courses.

Comparative Analysis of Procedure Costs:

The financial logic of medical travel is best illustrated through the disparity in costs across different hubs. This disparity reinforces the perception of India as the "best value" destination, even when accounting for the higher logistical burden.

Procedure	India (Est. USD)	Turkey (Est. USD)	Egypt (Est. USD)	Western Standard (Ref)
Heart Bypass (CABG)	$5,200 $8,000	$15,000+	$26,000	$123,000 (USA)
Kidney Transplant	$12,000 $15,000	$18,000 $22,000	$16,000	N/A

Hip Replacement	$7,000	$12,000+	$11,300	N/A
IVF Treatment	$3,250	$6,000+	$5,000	N/A
Dental Implant	$1,000	N/A	N/A	N/A
General Check up	$350	$500+	$250	N/A

The cost of a heart bypass in Egypt ($26,000) is more than triple the cost in India ($8,000), while the cost in India remains significantly cheaper than in high income countries, highlighting why it attracts over 50,000 African patients annually on medical visas.

Political Economy Implications and the Future Outlook

The decadal trend of Somali medical migration represents a massive failure of domestic health governance but also highlights a potential pathway for strategic redirection. The $100 million spent abroad annually is a powerful signal of market demand that is currently being captured by foreign economies.

The Asymmetric Integration into Global Markets

Somalia's participation in the global medical tourism market projected to exceed $273 billion by 2027 is profoundly asymmetric. Capital flows outward to fuel the health sectors of India and Turkey while domestic capacity stagnates. This "medical exodus" suppresses the political and fiscal incentives for local investment; as long as the elite can "opt out" of the domestic system, there is minimal pressure to build radiotherapy centers or transplant programs in Mogadishu. Furthermore, the "Brain Drain" of Somali medical professionals who were either lost to conflict or migrated overseas has left a void that foreign hubs are now filling for a substantial fee.

Specific clinical factors that necessitate outbound referrals.

The decision to seek medical care abroad is primarily motivated by specific deficiencies in domestic healthcare services, rather than solely by the existence of disease. These service gaps encompass shortages in specialist personnel, diagnostic capabilities, and essential supplies.

Oncology Infrastructure Deficiency: The urgent need for oncology services remains

a significant factor driving patient migration. Esophageal cancer constitutes 32.3% of malignancies documented in domestic studies, yet chemotherapy continues to be officially unavailable in Mogadishu. Additionally, the lack of radiotherapy and PET CT imaging compels patients to travel to India or Ethiopia for viable treatment options.

Cardiovascular Surgery Shortage: Hypertension prevalence rose to 26 33% between 2015 and 2016, posing a heightened risk for cardiovascular complications. While local cardiologists are able to manage basic hypertension cases, advanced procedures such as heart valve replacements and coronary artery bypass grafts (CABG) are predominantly referred to India and Egypt.

Renal Care and Transplantation Limitations: Chronic kidney disease (CKD) affects approximately 29.4% of the population, with renal failure accounting for 44% of hospitalizations in tertiary internal medicine departments in Mogadishu. Dialysis centers, although present, frequently operate at full capacity with limited resources, prompting patients to pursue kidney transplants in India.

Reproductive and Quality of Life Services: Procedures such as in vitro fertilization (IVF), urology, and orthopedic surgeries (including trauma care and hip replacement) constitute major reasons for seeking medical care in Turkey. This trend indicates an increasing demand for services that enhance quality of life, extending beyond immediate survival needs.

Clinical Outcomes: Morbidity, Mortality, and Treatment Failure

Somali patients travelling abroad for medical care frequently present complex clinical profiles and experience elevated mortality rates, often attributable to late stage disease at the time of arrival and inconsistent standards of care in destination facilities. Commonly, cases particularly those involving oncology are diagnosed at Stage III or IV, which diminishes the prospects for successful curative interventions and increases dependence on costly palliative treatments. Factors contributing to delayed presentation include socioeconomic constraints, diagnostic imprecision within resource limited domestic clinics, and procedural delays such as visa acquisition and fundraising activities.

Morbidity and Mortality Ratios

Somali patients commonly present at international hospitals during the later stages of illness, a situation aggravated by poverty, diagnostic errors in inadequately equipped Somali clinics, and delays attributable to visa acquisition and fundraising efforts.

These circumstances lead to highly advanced pathologies, especially among oncology patients with Stage III or IV metastatic disease. Such presentations considerably lower the probability of curative outcomes and shift clinical priorities toward expensive palliative care, thereby elevating morbidity and mortality ratios for Somali medical tourists relative to local patients in host nations.

Although comprehensive longitudinal studies examining mortality rates among Somali medical tourists are limited, available domestic and regional data yield important insights. For instance, research involving pediatric admissions at a referral hospital in Mogadishu indicated a 10.3% inpatient mortality rate for children under five, primarily due to complications arising from preterm births and birth asphyxia.

Similarly, tuberculosis treatment success in Benadir stands at 80.6%, with mortality and direct failure rates at 4.6% and 0.5% respectively, remaining below the World Health Organization's target of over 90%. Patients with multiple comorbidities such as HIV co infection or multidrug resistant tuberculosis continue to exhibit heightened immunological vulnerability even when receiving care abroad.

Advanced age and immunocompromised status consistently serve as predictors of treatment failure, irrespective of the technological capabilities of destination hospitals. Consequently, international medical travel does not inherently mitigate the increased mortality risks associated with severe chronic illnesses.

Empirical data, though limited in direct longitudinal studies of Somali medical tourists, reinforce these concerns. Pediatric admissions at Mogadishu referral hospitals report an inpatient mortality rate of 10.3% for children under five, predominantly caused by preterm birth complications and birth asphyxia.

Tuberculosis treatment metrics in the Benadir region reflect a success rate of 80.6%, with mortality at 4.6% and direct failure at 0.5%, falling short of WHO standards. Patients presenting with comorbidities, including HIV co infection or multidrug resistant TB, remain particularly vulnerable.

Advanced age and immunocompromised conditions are consistent predictors of treatment failure, regardless of the technological resources available at destination hospitals. Therefore, seeking medical care abroad does not eliminate intrinsic clinical vulnerabilities or elevated mortality risks associated with severe chronic diseases.

Post Operative Complications: Continuity of Care and Management Challenges

Successful outcomes in complex medical procedures such as organ transplants, joint replacements, and cardiac surgeries are contingent on sustained post operative care, ongoing physiotherapy, and precise pharmacological management.

Somali patients returning home after such interventions face abrupt discontinuity in care, as the domestic health system lacks the requisite infrastructure and expertise to manage intricate post surgical needs. For instance, patients who undergo anterior cruciate ligament reconstruction or hip replacement abroad may suffer severe complications, such as deep vein thrombosis or surgical site infections, due to inadequate rehabilitative services and poor wound management upon repatriation.

Cardiothoracic surgery patients are particularly vulnerable, as the absence of standardized laboratory monitoring often results in fatal hemorrhagic or thrombotic events.

Medical tourism hubs, notably in Turkey and India, have popularized “fast track surgeries,” characterized by rapid commercialization and premature patient discharge. Foreign patients, motivated by escalating accommodation costs, often return home against medical advice, elevating the risk of post operative complications such as pulmonary embolism and delayed healing.

When such complications arise, local Somali clinicians are frequently hesitant or ill equipped to intervene, especially in cases involving complex procedures performed abroad, resulting in significant treatment failure and patient morbidity.

Repatriation of Remains: Logistical and Financial Challenges

When medical interventions abroad do not succeed and death occurs, Somali families must address the considerable challenges associated with repatriating human remains. This process involves navigating intricate bureaucratic requirements, specialized embalming procedures, and significant air freight logistics.

Though certain international insurance policies may provide repatriation coverage, most Somali medical tourists lack comprehensive insurance, often necessitating diaspora led fundraising efforts to meet substantial hospital and transportation expenses. The financial and emotional impact of repatriating remains further amplifies the initial health related costs, frequently resulting in enduring economic hardship for surviving family members.

The Crisis of Repatriation of Remains

When patients pass away overseas after unsuccessful medical treatment, Somali families encounter the complex task of returning their loved ones' remains. This procedure requires specialized embalming, zinc lined caskets, compliance with various regulatory protocols, and high air freight fees. While some travel insurance policies may include repatriation, many Somali medical tourists are uninsured, which leaves families without support in unfamiliar foreign cities such as New Delhi, Istanbul, or Cairo. They must navigate local legal systems and

initiate additional fundraising campaigns to settle hospital bills and repatriation expenses, thereby compounding the financial burden already incurred through medical expenditures.

Systemic Challenges in Destination Countries

Somali medical travelers face a spectrum of systemic challenges in host countries, encompassing exploitation, language barriers, limited legal recourse, and socio economic marginalization.

· **Exploitation by Intermediaries:** The medical tourism ecosystem is mediated by facilitators and translators who, rather than streamlining care, often engage in unethical practices. Patients are steered toward substandard facilities for financial kickbacks, subjected to redundant diagnostic tests, and extorted through inflated invoices rapidly depleting their resources before treatment commences.

· **Language and Cultural Barriers**: Communication deficits undermine informed consent and effective care. Studies reveal that only 42% of Somali patients in Turkey felt language was not a barrier, with many unable to comprehend risks, alternative treatments, or post operative requirements. Even in culturally proximate settings like Egypt, nuanced medical terminology remains inaccessible to lay patients, resulting in misaligned expectations and compromised outcomes.

· **Medical Malpractice and Legal Recourse:** Somali patients have minimal practical avenues for seeking justice in cases of medical negligence abroad. Legal processes are prohibitively expensive and complex, with clinics often withholding records or attributing complications to premature repatriation. The absence of robust diplomatic or governmental advocacy leaves patients disenfranchised and vulnerable.

· **Socio Economic Marginalization and Xenophobia:** In destinations such as Ethiopia, Somali patients contend with high living costs, substandard accommodations, and increased risk of secondary infections. The psychological strain of navigating illness in foreign environments, compounded by financial insecurity and xenophobic attitudes, further impedes recovery and exacerbates health outcomes.

Economic Policy and Strategic Outlook

Somali outbound medical mobility where patients seek healthcare services abroad due to inadequate domestic provision imposes a formidable and persistent economic burden on both individual households and the nation at large.

This phenomenon not only drains resources from families and the public sector but also undermines the country's developmental trajectory. The following expanded analysis examines the multifaceted economic costs associated with medical travel, their cumulative effect on national growth, and the enduring implications for Somalia’s healthcare system and broader socio economic landscape.

Magnitude of Capital Flight

Each year, Somali patients collectively spend more than $100 million on medical care in foreign countries. This figure, representing direct expenditures on treatment, travel, accommodation, and related services, constitutes a substantial loss of capital from the national economy. The outflow is not limited to the cost of medical procedures; ancillary expenses such as intermediary fees, inflated diagnostic costs, and extended stays further amplify the fiscal impact.

This sustained capital flight undermines Somalia's financial sovereignty, restricting the government's capacity to invest in core infrastructure or public goods, including healthcare, education, and social protection systems. The opportunity cost of these expenditures is immense, as funds spent abroad could otherwise catalyze domestic economic growth and promote local industry.

Chronic Underinvestment in Domestic Health Infrastructure

The economic burden of outbound medical travel perpetuates a vicious cycle of underinvestment in Somalia's healthcare sector. Resources that could support the construction and modernization of hospitals, procurement of advanced diagnostic technologies, and improvement of medical training are instead channeled overseas.

This deprives the local system of necessary funding, exacerbating the gap between demand and supply of quality health services. As a result, the domestic sector remains ill equipped to treat complex medical conditions, further reinforcing the reliance on foreign care and perpetuating capital flight. Long term underinvestment erodes institutional capacity, limits innovation, and diminishes the quality of care available to the Somali population.

Implications for National Development and Sovereignty

The financial drain associated with outbound medical mobility directly impedes Somalia's progress toward Sustainable Development Goals (SDGs), particularly those related to health and well being. Reduced government revenue constrains public spending and limits efforts to expand access to essential services, address health disparities, and improve population outcomes. Over time, this undermines national resilience and exacerbates socio economic inequalities. Furthermore, dependency on foreign medical systems compromises Somalia's sovereignty, making the country vulnerable to external market fluctuations, changing visa regimes, and diplomatic tensions each of which can suddenly restrict access to necessary healthcare for Somali citizens.

Brain Drain and Human Capital Flight

The economic repercussions extend beyond fiscal loss. The ongoing reliance on external care incentivizes Somali medical professionals to seek employment opportunities abroad, further depleting the nation's pool of skilled practitioners. This brain drain diminishes local capacity, increases costs for those remaining, and reduces the quality and scope of services available

domestically. The cycle of capital and human resource flight is mutually reinforcing, as the absence of advanced facilities and expertise compels patients to travel, while the lack of investment discourages professionals from returning home. Over decades, this trend leads to a chronic erosion of institutional knowledge and technical proficiency within Somalia's health system.

Long Term Socio Economic Impact

The continued economic strain generated by outbound medical mobility exerts significant long-term effects on Somali society. Families funding overseas medical treatments frequently exhaust their savings, liquidate assets, or take on considerable debt, which leads to financial insecurity, decreased consumption, and restricted upward mobility. At the community level, these dynamics result in reduced local investment, slowed job creation, and diminished social cohesion, as vital resources that might otherwise support institutions such as schools, clinics, or enterprises are instead directed abroad. On a broader scale, sustained capital outflows impede economic diversification and weaken resilience against various shocks medical, economic, or environmental by eroding foundational institutions.

Strategic Opportunities and Policy Recommendations

Recent stabilization of Somalia's economy evidenced by progress toward the HIPC Completion Point and a reduction in sovereign debt presents an important opportunity to address these adverse trends. Investment in domestic healthcare infrastructure, establishment of tertiary care centers, and introduction of risk pooling mechanisms can reduce the reliance on outbound medical travel.

Policy measures including regulation of intermediaries, establishment of bilateral patient protection agreements with host countries, and incentives for skilled professional repatriation are critical for mitigating capital flight and developing sustainable capacity. Reallocating resources to domestic healthcare fosters system strengthening, enhances national self reliance, shields household finances, and supports long-term socio-economic advancement.

4. Discussion

4.1 Principal interpretation of findings

The synthesis leads to a clear conclusion: Somali outbound medical travel effectively operates as an unofficial parallel tertiary care system. This arrangement is privately funded, minimally regulated, insufficiently monitored outside the India corridor, and primarily driven by domestic shortcomings in diagnostics, specialized treatment, and continuity of care.

Three principal findings emerge.

Firstly, outbound medical travel constitutes a significant, measurable component, with India's post-pandemic increase indicating not only a return to previous volumes but also the accumulation of unmet healthcare needs.

Secondly, the clinical profile aligns with the logic of tertiary care gaps; patients seek services abroad that are most likely to fail first in health systems lacking oncology infrastructure, quality dialysis, advanced imaging, transplant readiness, subspecialty expertise, and effective referral practices.

Thirdly, challenges related to patient outcomes persist even when data are not comprehensively collected. Evidence consistently highlights late presentation, financial disruption, intermediary risks, and discontinuity after returning home as factors undermining the benefits of foreign treatment.

From a systems perspective, asymmetrical measurement is more than a technical detail. Accurate quantification of outbound referrals is essential for strategic purchasing, effective negotiation of bilateral agreements, and targeted domestic investment to reduce the most substantial service line leakage.

4.2 Practical Implications

Clinically, these findings demonstrate that the quality of referrals is nearly as critical as the quality provided at destination facilities. High standards of care internationally cannot fully compensate for inadequate initial staging, insufficient pre-referral assessments, or lack of appropriate follow-up. In specialties like oncology, nephrology, and advanced cardiology, the effectiveness of the care continuum relies on the strength of each transitional phase.

Financially, current evidence reveals Somalia already bears considerable costs for tertiary care; however, these expenses are managed inefficiently through varied international invoices, emergency funding sources, and informal social support, rather than systematic risk pooling, negotiated care packages, or development of domestic capacity.

Operationally, establishing structured cross-border pathways could reduce preventable harm prior to significant investments in domestic tertiary care. Implementation of standardized referral protocols, access to tele-specialist consultations, accredited

destination networks, and mandatory discharge summaries would improve patient safety with reasonable institutional investment.

Building on these insights, it is clear that closing the gap between strategic intent and operational delivery requires coherent policy action that integrates referral governance, robust data systems, and investment in local capacity.

Prioritizing the creation of a National Cross-Border Care and Referral Program with standardized documentation, clinical triage rules, and compulsory discharge handover can streamline pathways, reduce unnecessary patient transfers, and safeguard those whose travel is unavoidable. Simultaneously, establishing a national outbound referral registry with comprehensive tracking of diagnoses, destinations, financing mechanisms, and longitudinal patient outcomes will enable evidence-based decision-making and ensure accountability.

Together, these measures lay the groundwork for targeted improvement in patient safety, system efficiency, and financial protection, reinforcing the imperative to align immediate cross-border solutions with the long-term goal of a resilient, self-sustaining health sector.

4.3 Policy recommendations

Policy domain	Recommended action	Expected gain
Referral governance	Create a National Cross Border Care and Referral Program with standardized documentation, clinical triage rules, and compulsory discharge handover	Fewer unnecessary referrals; safer unavoidable travel
Data systems	Establish a national outbound referral registry with diagnosis, destination, financing mechanism, and 30/90/180 day follow up	Measurable morbidity, mortality, and financial protection outcomes
Financial protection	Develop catastrophic illness protection for high leakage	Reduced distress financing and inequity

	conditions through NHIA linked pooled funding	
Domestic capacity building	Invest first in oncology diagnostics, chemotherapy day care, dialysis quality networks, advanced imaging, pathology, and selected cardiac diagnostics	Progressive reduction in external dependency
Broker regulation	License facilitators, require disclosure of fees and hospital relationships, and create a complaints mechanism	Less exploitation and greater transparency
Bilateral health diplomacy	Negotiate referral compacts with India, Turkey, Ethiopia, and Egypt around package prices, navigation support, and minimal outcome data sharing	Improved accountability and predictable pricing

Table 10. Practical implications and policy recommendations derived from the synthesis.

5. Limitations

This manuscript is limited by the lack of a national outbound referral registry on the Somalia side and by restricted public reporting from destination countries across several corridors. The Indian dataset presents movement metrics rather than individual patient records, and the 2015 2017 and 2019 2024 datasets are not fully interoperable. Turkey has provided only a validated anchor year, rather than a comprehensive time series. Ethiopia and Egypt represent significant corridors, yet remain insufficiently quantified due to gaps in publicly available, nationality specific data.

The primary scientific constraint lies in outcome measurement. In the absence of linkage among outbound episodes, facilities, treatments, and post return follow ups, any aggregated morbidity or mortality ratio would reflect rhetoric more than rigorous science. Similarly, cost estimates should be regarded as plausible approximations rather than audited financial accounts. Lastly, some materials employ scenario modelling for comparative visualization; these projections serve planning purposes but should not be interpreted as formal administrative series.

6. Conclusion

Somali outbound medical mobility poses considerable macroeconomic challenges. Each year, capital outflows surpass $100 million, which impedes the Federal Government's efforts to achieve health related Sustainable Development Goals. The ongoing transfer of resources to foreign healthcare systems not only weakens domestic health infrastructure but also accelerates the emigration of skilled professionals. Nevertheless, Somalia's attainment of the HIPC Completion Point and recent reductions in sovereign debt present a timely opportunity for recalibrating public spending priorities. Anticipated GDP growth, supported by increasing domestic demand and robust diaspora remittances, provides an avenue for strategic investment in health sector reform and development.

This dynamic underscore systemic shortcomings within the national healthcare system, significant economic trade offs, and notable individual perseverance. While seeking advanced treatments abroad offers access to superior clinical care, it is accompanied by substantial clinical, financial, and social costs. Challenges such as late stage disease detection, insufficient postoperative care continuity, and exposure to unregulated international medical markets increase patient morbidity, contribute to poor treatment outcomes, and elevate mortality rates. Effective resolution of these issues requires a comprehensive policy approach. In the immediate term, it is crucial for the Federal Government to establish rigorous regulatory frameworks for local medical facilitators, pursue bilateral agreements with destination countries to ensure transparency and legal protections, and enhance secure management of medical records to improve postoperative care.

Sustainable progress depends on significant investments in domestic healthcare infrastructure, including the development of tertiary hospitals, deployment of advanced diagnostic technologies, and establishment of reliable financial risk pooling mechanisms. Redirecting financial flows to support local capacity building and incentivize the retention of skilled professionals are essential steps toward advancing the health, dignity, and economic resilience of Somalia's population.

The fiscal impact of outbound medical travel imposes both immediate and long term constraints, shaping Somalia's developmental path for generations. A unified strategy focused on strengthening internal health systems, retaining expertise, and recapturing resources currently lost to external providers is vital. With sustained investment and reforms, Somalia can significantly enhance its healthcare outcomes, economic stability, and overarching national aspirations.

About the Author

Dr Abdulrazaq Yusuf Ahmed (Dr Jalaaludiin) is a Somali physician, public health specialist, and health-systems reform leader with more than fifteen years of progressively senior experience across national health policy, tertiary hospital leadership, emergency response, academic mentorship, and health-financing reform. He currently serves as **Director General of the National Health Insurance Authority (NHIA)** under the Federal Ministry of Health & Human Services, Somalia, where he leads efforts related to health financing, strategic purchasing, governance, and financial risk protection in support of Universal Health Coverage.

Dr Ahmed previously served as **Director General and Chief Executive Officer of Demartino National Public Hospital** and as **National Incident Manager for Somalia's COVID-19 Response**, contributing to hospital transformation, emergency coordination, and national outbreak management in fragile and high-pressure settings. His career has also included senior advisory and leadership roles in health systems strengthening, service delivery reform, medical regulation, and public-sector governance.

Academically, he is a scholar-practitioner with training in medicine, public health, health management, healthcare economics, and demography and social sciences. He has authored and co-authored numerous peer-reviewed and policy-oriented publications on health systems governance, financing, infectious diseases, hospital management, and equitable access to care. His work is particularly concerned with strengthening health systems in fragile contexts and translating evidence into practical institutional reform.

Through this article, Dr Ahmed brings together policy insight, field experience, and academic analysis to examine Somali cross-border healthcare seeking not as an isolated mobility pattern, but as a revealing indicator of systemic health-sector weakness and an urgent call for reform.

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Dr Abdulrazaq Yusuf Ahmed

MPH, MSc(HM), PhD (Health Economics), PhD (Demography & Social Sciences)

Health Systems Expert | Public Sector Transformer | Global Health Leader | Academic Researcher

Director General, National Health Insurance Authority (NHIA)
Federal Ministry of Health, Somalia

Email:	drjalaal@nhia.gov.so | drjalaal@hotmail.com drjalaal@rugsan.org | drjalaal@riyaadaacademy.org
Phone:	+252 615 572 605
Web:	drjalaaludiin.com | drjalaaludiin.link
Research:	ORCID | Scopus: 57222062380 | WoS: ADD-3214-2022
Affiliations:	RUGSAN | RIYAADA | LinkedIn

Global health leadership • Health systems strengthening
• Public sector reformer and Academic Researcher