PERSPECTIVE

Developments in Medical Tourism
医疗旅游业的发展

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Summary[**]

As a newly emerging pattern of consumption and production of healthcare services, medical tourism is featured with particular regional characteristics in the range of service for patients elect to travel across international borders with the intention of receiving medical treatment. From perspectives of globalization and supply consideration, this article illustrates the drives, size and scope of medical tourism. Experiences from Korea and UK are introduced to explain commonalities and distinctions of diverse medical tourism treatments and their destinations. In addition, the authors also illustrate payment mechanism, potential challenges and China's current medical tourism patterns.

作为一种新兴的医疗服务供给消费模式，医疗旅游的一大特点是为选择出境接受治疗的患者提供了富有地域特征的医疗服务项目。本文从全球性和医疗服务供给的角度出发，介绍了医疗旅游的驱动源、规模和服务范围。作者通过韩国和英国的相关经验，阐述了多样化的医疗旅游业及其所在地的共性和区别。此外，作者还介绍了医疗旅游业的付费机制、潜在的挑战和中国目前的医疗旅游业现状。

Background


Dr. Neil Lunt

Across the world there are newly emerging patterns of consumption and production of healthcare services. These arise from the global flows of patients and healthcare professionals (doctors, nurses and allied healthcare staff), medical technology, capital funding and regulatory regimes (standards and accreditation) across national borders.


Prof. Ki Nam Jin

Particular attention has been paid to flows of patients who are being treated outside of their national jurisdiction. Patients, it would appear, are on the move and so-called *medical tourism* is on the rise. Medical tourism may be defined as when patients elect to travel across international borders with the intention of receiving medical treatment. Included within the definition are a broad range of medical services and innovations: dental care, cosmetic surgery, elective surgery, fertility treatment, transplantation, and stem cell therapy.

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Setting the boundary of what is health and counts as medical tourism is not straightforward. For example, cosmetic surgery for aesthetic rather than reconstructive reasons would be considered outside the health boundary under OECD definitions for the purposes of trade accounts (OECD, 2010, pp. 30-31). Similarly, stem cell therapies are distinguished from stem cell *treatments* when there is lack of clinical efficacy data and supporting evidence.

Medical tourism in some European settings is related to the broader notion of health tourism which, in some countries, has longstanding historical antecedents of spa towns and coastal localities, and other therapeutic landscapes. In countries such as Hungary this strong wellness tourism tradition continues alongside the development of medical treatments and interventions. Within a number of Asian settings, Oriental medicine is a major specialty that is offered. Clearly, the range of services sought and offered has a particular regional texture and as research scholarship develops it is beginning to understand far more the commonalities and distinctions of diverse medical tourism treatments and their destinations.

The size and scope of medical tourism

Some places may be simultaneously acting as countries of origin and destination in a medical tourism marketplace. High-income countries may treat overseas elites whilst at the same time their citizens choose to travel as medical tourists to Lower and Middle Income Countries for treatments. Thus, Harley Street in the UK and facilities including the Mayo and Cleveland Clinics in the United States have longstanding reputations in the international provision of healthcare. But UK and US patients themselves travel outwards for treatments subject to a range of push and pull considerations.

Drivers of medical tourism include dimensions of globalisation – economic, social, cultural and technological. Many domestic health systems are undergoing significant challenges and strain – heightened expectations, tightened eligibility criteria, waiting lists, and shifting priorities for health care may all contribute. The role of Information Technology in promoting new products and information, as well as greater availability of air travel and travel visas are also significant. Medical tourists may be diaspora or second-generation migrants, and liable to travel back to countries where there are historical, cultural and familial connections. Familiarity, availability, price, quality and legality may thus all be factors within complex decision-making frames of medical tourists.

There are also supply considerations. For example, as economic growth slows in western industrialised countries and austerity bites, public and private healthcare organisations are seeking additional income from a range of sources, including international patients. A range of national policy characteristics will shape the involvement of domestic healthcare providers in delivering treatments to medical tourists including:

- *the regulatory framework (including the lack of one)* which may present constraints on the services that may be offered to inward patients;
- *state and regional support for the development of medical tourism;*
- *professional bodies' support and involvement within medical tourism;*
- *the structure of health care provision (e.g. sole practitioner practices; entrepreneurial approaches and less socialized approaches to medicine);*
- *cultural and ethical standpoints of providers on offering particular treatments*; some providers may be prepared to offer treatments that are more risky, or to place different emphasis on the ethical issues involved;
- *economic position, exchange rate and comparative advantage*;

- *health care reform and existing capacity within systems* will dictate, to a large extent, whether providers will engage in treating overseas patients;
- *the role of national/international quality frameworks may shape the way in which* countries engage;
- *the willingness of professionals to treat individuals who lie out with safety guidelines and normal professional criteria (age, weight, medical history).* Thus, are particular treatments offered that would not routinely be offered by providers in the same country or in overseas countries? (Lunt et al., 2013a)

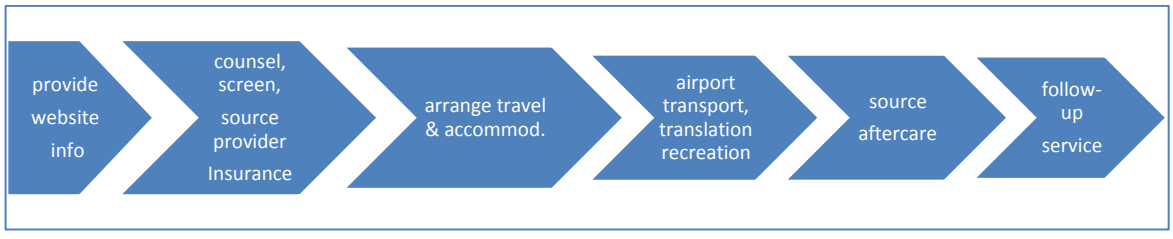
Despite the global push for many countries to offer both high-end and/or relatively low-cost treatments, we currently know very little about many of the key features of medical tourism. There are no authoritative data on the number and flow of medical tourists between nations and continents. So although there is broad agreement that the medical tourism industry has grown significantly over the past decade, there is wide speculation on its actual size. The Deloitte management consultancy for example suggested a figure that has been regularly reproduced in the literature, that total worldwide figures lie somewhere between 30 and 50 million medical tourists travelling for treatment each year (Ehrbeck et al., 2008). Even where commentators avoid placing a figure on the number of medical tourists, the frequent citation of medical tourism as a $60bn industry can be traced back to Deloitte's report (MacReady, 2007; Crone, 2008; Keckley and Underwood, 2008; for criticism see Connell, 2013 and Lunt et al., 2013b).

Medical tourist destinations differ in how much they openly promote the cultural, heritage and recreational opportunities. It is likely that for some treatments the vacation and convalescence functions will be more marginal, for others it could be a more significant component of consumer decision-making. The reputation of places as highly customer-focused service providers is also a prevalent focus of advertising. An emphasis on marketing services as high technology and high quality is common, as well as identifying clinicians that have overseas experience (training, employment, registration).

The experiences of Korea and the UK

Medical tourism as an emerging global industry has a range of commercial interests including health care providers, website providers, brokers and facilitators, accommodation, and conference and media services (See Figure 1). A range of national government agencies are also involved and policy initiatives have sought to stimulate and promote medical tourism in their countries (these include countries as diverse as Korea and the UK). Within Asia (for example, Thailand, India, Singapore, Malaysia), Europe (including Hungary and Poland) and beyond, governments promote their comparative advantage as medical tourism destinations at large international trade fairs, via advertising within the overseas press, and official support for activities as part of their economic development and tourism policy (see Lunt et al., 2011; Reisman, 2010).

Figure 1: Medical Tourism Pathways



Faced with global economic recession and an aging population, the Korean Government sought to find ways to boost the economy and after 2009 the Korean Government allowed hospitals/clinics to fully market health services to foreign patients. The process of promoting the medical tourism industry was expected to generate job opportunities and be a new growth engine for economic development. To this end a medical visa was also adopted (Yu and Ko, 2012; Kim et al., 2013).

The actual development and delivery of medical tourism policy is undertaken by public organizations including Korea Health Industry Development Institute (KHIDI) and the Korea Tourism Organization. KHIDI, under the Ministry of Health and Welfare has two purposes: to improve the national health industry by providing comprehensive and professional support programmes; and second, to strengthen the competitiveness of the national health industry. Its department of international cooperation has five teams actively involved in promoting medical tourism (see also, Kim et al., 2013).

Domestically many Korean medical institutions and leading hospitals and clinics have supported the venture. Particularly, they sought to increase revenues by treating foreign patients, charging premiums far above domestic insurance rates. Participating providers hoped that treating foreign patients would bolster their domestic reputation for medical excellence, and there were anticipated benefits for improving service quality, because many medical institutions in Korea are accredited by Joint Commission International. Under Korean law, any medical institutions that intend to treat foreign patients are required to be registered by the Ministry of Health and Welfare. Within Korea, the percentage of medical institutions registered has increased from 2.6% to 3.6% between 2009 and 2011. Nearly 98% of tertiary hospitals are registered.

Table 1: Source country of medical tourists to Korea 2009-2011

Nation	2009	2010	2011	Average growth rate (%)
USA	13,976 (32.6%)	21,338 (32.4%)	27,529 (27.1%)	40.3
Japan	12,997 (30.3%)	11,035 (16.8%)	22,491 (22.1%)	31.5
China	4,725 (11.0%)	12,789 (19.4%)	19,222 (18.9%)	101.7
Russia	1,758 (4.1%)	5,098 (7.7%)	9,651 (9.5%)	134.3
Mongolia	850 (2.0%)	1,860 (2.8%)	3,266 (3.2%)	96.0
Source: Statistics on International Patients in Korea, 2011 (KHIDI)				

Within the UK, measures to support international activities of the public health system (to treat private international patients in parallel to public taxpayer funded UK patients) include NHS Global established in 2010, and the launch of the Healthcare UK Scheme in 2012 promoting wider health interests. Attempts to attract international patients must be placed in the wider context of countries offering a suite of expertise and services – consultancy, training, and education around health provider development and delivery.

How treatment is funded

Payment mechanisms for medical tourism funding are three-fold: outsourcing, insurance, and out of pocket.

- Outsourced patients
  Those are patients opting to be sent abroad by health agencies using cross-national purchasing agreements. Typically, these sorts of agreements are a short-term measure driven by long waiting lists and a lack of available specialists and specialist equipment in the home country. Middle-East countries including Kuwait, UAE and Saudi Arabia support patient to travel to countries in Europe including Germany and the UK. Plausibly, the health systems within source countries (including UK, Germany and the United States) could develop relations with off-shore medical tourism facilities to leverage cost savings – providing individuals with a choice of overseas destinations. This could also reduce waiting lists – and reflects a form of outsourcing or more 'collective' medical travel. However, even if opportunities for financial benefit exist and medical tourism is an option in a number of countries there are significant political objections and sensitivities. This for example helps explain why Medicaid and Medicare in the United States do not support patients travelling abroad for treatments despite arguments that doing so would deliver significant financial savings.

- Individual out-of-pocket payments for treatment
  People who want access to private treatment can afford it themselves, drawing on income, savings, loans, and family and community support.

- Insurance
  A potentially lucrative source of income is private and workplace health insurance systems. To date there has been relatively limited success by medical tourist providers in tapping these insurance revenue streams. Most insurance policies in the UK for example explicitly exempt overseas treatment, whilst standard policy exclusions include conception, cosmetic, reconstructive or weight loss treatment and dental/oral treatment. These are the sorts of treatments where evidence suggests patients then choose pay out of pocket, both domestically and abroad. Within the United States, examples of more institutionalised arrangements do exist but are rare. In 2009, following its achieving international accreditation, a hospital in Mexico arranged a deal with a US-based insurance group which enabled Blue Cross and Blue Shield members to utilise that hospital's services. Singapore is one example of a country that has allowed some portability with insurance.

Evidence base for medical tourism

Despite the huge amount of speculation and expectations around medical tourism hard evidence on many aspects is difficult to find (see Lunt and Carrera, 2010 for review). Alongside the dearth of empirical data is the tendency for discussions to be focussed on marketing and market growth, without being critical of assumptions. Fortunately this gap is beginning to be addressed and scholarship has encompassed discussion of North American (Crooks et al., 2010; Johnson and Garman, 2010), Australasian (Barrowman et al., 2010), Asian (NaRanong and NaRanong, 2011; Pocock and Phua, 2011; Wongkit and McKercher, 2013) and European contexts (Hanefeld, et al, 2013; Legido-Quigley at al., 2011). Within the UK, a national-funded study is soon to report on the implications of medical tourism for the NHS (see Lunt et al., 2013c)

Emerging challenges: clinical and programme levels

The policy, programme and clinical recommendations concerning medical tourism should be underpinned by broader understanding of trends, clinical implications, and wider system level implications

As well as patient motivations, decision-making, experience and satisfaction, this should include understanding of treatment outcomes. How patient information flows across national boundaries is an important question for the medical tourism industry, with continuity of care affected if patient records are not shared. Patients should receive appropriate information, advice and input at all stages of the caring process. This includes informed consent and advance warning that redress may be more difficult if treatment is received outside of country of residence. Whilst ethical and legal issues arise for all forms of medical care – informed consent, liability and legislating for clinical malpractice – these are intensified for medical tourism. 'Cosmetic tourism', 'fertility tourism', 'transplant tourism', to say nothing of recent developments in the areas of 'stem cell'-tourism' and 'euthanasia tourism', raise ever-more complex medico-legal and ethical questions.

Legal dilemmas for medical tourists include that pursuing a case overseas brings particular difficulties. Should complications arise during medical tourism, patients may not be covered by insurance or indemnity policies that are carried by the hospital, the surgeon or physician treating them, and they may have little recourse to local courts or medical boards. One reason US health care is so expensive is the size of malpractice premiums, an indication that US citizens are litigious and value their right to seek legal redress.

The public health aspects of medical tourism have not been adequately studied. Of significance is the potential for hazardous micro-organisms transferring between hospitals located in different parts of the world on the body of a medical tourist (Green, 2008; Lunt et al., 2012). These could include antimicrobial resistance, such as the potential for *Clostridium difficile*, VRSA, XDRTB, or a dangerous pathogen, such as SARS.

Given asymmetries of information in healthcare, patients place significant trust in training, qualifications, motivations and competence of health care professionals. When we step outside our national health system questions arise concerning robust clinical governance arrangements and quality assurance procedures in provider organisations, intended to safeguard the quality of care provided.

System level challenges

Countries seeking to develop medical travel earnings have options of growing their own health service (public and private) or inviting partnerships with large multinational players. Securing accreditation from international programmes may be a part of the development of services and an attempt to badge quality. Achieving partnerships with overseas hospitals and universities (e.g. Asian countries' relations with the American private sector), can fulfil a similar role. We need to know far more about these relationships across the globe.

Patients travelling to countries with developed healthcare systems raise important questions for comparative healthcare policy and management. Knowing more about revenue generation (health treatment and wider associated non-health income) and whether infrastructural investments and favourable spill-overs benefit local patients is important. Does trickle down of best practice occur and can we identify processes of technological transfer and surgical learning? Similarly, what is the impact on staff retention (international/internal brain retention and return) of such medical tourism activities (see Lunt et al., 2013a)?

The lack of data is problematic if countries are to keep fully informed about the significance (potential or actual) of medical tourism for their health systems. Mechanisms are needed that help us track the balance of trade around medical tourism on a regular basis – how many people travel,

where and for what? Currently, the evidence base is scant to enable us to assess winners and losers at the level of system, programme, organisation and treatment.

China

Turning to China: what is the emerging evidence about inward and outward flows? As an importer of medical tourists we know relatively little of the developments despite a number of institutions aiming to treat overseas patients. This knowledge base may develop with the establishment of the Shanghai International Medical Zones after 2015. Regarding outflows, some evidence is beginning to emerge, regarding relationships with Taiwan (Liu, 2012), Hong Kong (Ye et al., 2011) and Korea (KHIDI, 2011). There has been a steady growth of travellers to Korea from 4,725 in 2009 to 19,222 in 2011 (KHIDI, 2011). Over 70% of Chinese patients to Korea are women, and a large percentage is aged 20 to 39. China is first ranked in plastic surgery, where Chinese patients occupy nearly 59% of market share in Korea. The challenge is to build on this emerging scholarship more systematically and conceptually. Certainly, the future of medical tourism regionally – and perhaps globally – will involve an enlarged understanding of Chinese patient flows both inwards and outward, the benefits and drawbacks at the levels of individual, institution and system.

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