

Overview: Medical Tourism Today: What, Who, Why and Where?

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INTRODUCTION

Travel for health reasons is not new. ‘Taking the waters’ has long been a pursuit of those who could afford the travel to spa destinations, often crossing borders to do so. There are numerous 18th century accounts of wealthy Europeans traveling to famous French spas or to the medicinal waters of Bath and Vichy for treatments for gout, skin ailments, liver disorders and other maladies, a practice that, by the 19th century, had trickled down to the middle classes (Lunt, et al., 2011). It was also customary in the pre-antibiotic era for people with certain infectious illnesses to be encouraged to rest in less stressful or polluted locales, an early form of enjoining ‘medical’ to ‘tourism.’ Travel for disease treatment was also commonplace, especially if few or no services were at hand and one had the means to be a mobile patient. But a literal sea change has been occurring in recent years. Growing technological sophistication and low labour costs in developing countries, combined with cheap airfares and a growing global demand for healthcare services, has created a burgeoning new entrepreneurial sector: medical tourism.

For an industry with an annual global value estimated to reach over US\$100 billion in 2012 (Chambers, 2011), there is surprisingly little empirical literature on the topic of medical tourism, although this is slowly beginning to change. In this chapter we review what evidence there is, with a focus on the cross-border pursuit of more conventional or customary forms of healthcare (dental, surgical and diagnostic). Our findings are based upon a systematic evidence review of medical tourism, first undertaken in 2009 (Hopkins, Labonté, Runnels & Packer, 2010), and subsequently updated. All forms of medical tourism comprise the pursuit of cross-

border care, whether across provincial, state or national borders. Our focus in this book lies more with patients seeking healthcare outside their country than with treatment shopping within the same country.

SCALE AND SCOPE

Hard data on medical tourism is hard to come by, and the physical scale of the industry is difficult to grasp. Its virtual (internet) presence, however, is immense. A search of the term ‘medical tourism’ in Google in early December 2012 elicited 68,100,000 results. ‘Medical tourism brokers’ produced 11,100,000 results. There are at least several hundred elaborate interactive websites that allow prospective patients to schedule their out-of-country services, contact their surgeon or other specialists, book airfare and accommodation, and arrange for tourist excursions. Some of these are managed by providers themselves, others by medical brokerage firms; almost all are commercial in nature, raising alarms about inaccurate or misleading claims, especially in more controversial areas such as stem cell therapy or transplantation. There are few, if any, non-commercial medical tourism sites (Lunt, et al., 2011; Turner, 2011).

There is no agreement on the size of the medical tourism market. Few countries track inbound or outbound medical travellers, and there are powerful vested interests in projecting a large market as one means of creating it. The Bumrungrad International Hospital in Thailand, as one example, claims to admit 400 thousand foreign patients annually (Bumrungrad International Hospital, n.d.). At the other extreme, a 2008 McKinsey report estimated global cross-border patients at not more than 60,000 to 85,000 per year, with most travelling to the United States (US) from Latin America, the Middle East, Europe and Canada respectively (Ehrbeck, Guevara

& Mango, 2008). Both sets of estimates have been subject to critique. The McKinsey report in particular has been criticized for using a very small sample of accredited hospitals only, which heavily biased findings towards US markets, eliminating all United Kingdom (UK) sites, ignoring flows between developing countries and assuming that its hospital sample accounted for most of the market (Youngman, 2009). Estimates of a distinctly different order of magnitude emanate from forecast reports from Deloitte on outbound patients from the US. It forecasted 750,000 American medical tourists in 2007 (Deloitte Center for Health Solutions, 2008), with a projected growth to almost 16 million by 2017. In 2009, it adjusted its projections downwards with an estimated 580,000 outbound American patients in that year, due largely to the effects of the recession on ability to pay, and a more modest 35 percent annual growth rate thereafter (Deloitte Center for Health Solutions, 2009). Assuming, as the McKinsey report did, that American medical tourists account for about 10 percent of the total market (Ehrbeck, et al., 2008), this extrapolates to almost 6 million patients who sought care beyond their borders in 2009. This number is close to the estimate of 5 million made by Youngman (2009) in response to the McKinsey Report's unconvincing low figures: Youngman's estimate excluded emergencies, expatriates, internal country travel and wellness, and used only the lowest possible official figures from countries while ignoring countries that are active but have no data. Although this figure of between 5 and 6 million medical tourists annually may be considered a reasonable guesstimate, all such figures should be regarded cautiously. The entrepreneurial dimension of medical tourism creates a marketing element in which estimates of high growth are used to create a self-fulfilling prophecy.

THE WHAT

The term ‘medical tourism’ may not be the best. It conflates what some distinguish as ‘health travel’ (which has more to do with maintaining or restoring wellbeing) from ‘medical travel’ (the pursuit of specific medical diagnosis or treatments often involving invasive surgical procedures) (Pocock & Phua, 2011). Economists studying the phenomenon¹ sometimes describe it in more arcane terms such as ‘medical value travel exports’ or ‘medical tourism exports,’ since the money foreign patients leave behind can be counted as a country’s export earnings. Medical ‘tourism’ has also been criticized for minimizing the urgent care that some people seek by making it sound like an add-on to a holiday junket.² Many argue that ‘medical travel’ is a more appropriate concept (and one which we will use interchangeably with medical tourism); although in most destination countries actively recruiting foreign patients, the tourism angle is increasingly a prominent branding feature. In true branding style, ‘medical tourism’ has stuck and even propagated a bevy of offspring: transplant tourism, stem cell tourism, reproductive tourism, cosmetic surgery tourism, dental tourism, lipotourism and abortion tourism, alongside the more traditional scions of wellness or spa tourism, and the oxymoronic suicide tourism.

THE WHO

While the scope of what medical tourism consists of remains grey, there is more agreement on *who* is a medical tourist. Most analysts exclude vacationers participating in spa therapies or alternative wellness regimes, individuals injured while on holiday, or expatriates receiving care in the country in which they (temporarily or permanently) reside. Even here,

however, there is some blurring of definitional boundaries. In 2009, Spanish physicians' unions launched a tirade against British citizens with holiday homes in Spain, accusing them of engaging in 'scalpel tourism,' taking advantage of Spain's shorter queues for hip and cataract surgery and 'bleeding money out of Spain's health service' (Tremlett, 2009). At issue was the level of compensation such 'health tourists' were contributing back to Spain's health system.

Simplified, the medical tourism industry consists of three primary actors: patients seeking healthcare outside their country, providers in destination countries willing to offer it and medical brokers/facilitators linking the two. A fourth is often complicit, although not always central to the process, the travelling patient's personal physician who may provide the detailed medical history often required. There are several secondary actors: governments in destination countries who view the industry as a source of foreign revenue often offering generous subsidies as incentives; private and some public health insurers with interests in lowering costs through incentivizing cheaper services abroad (or minimizing complications on a patient's return); and the tourism industry in destination countries that increasingly partners with providers to create attractive package deals (Figure 2.1). Websites and industry conferences³ become the glues that bind the parts together. The invisible people are those in destination countries whose own access to healthcare may be compromised by an emphasis on the more lucrative foreign market.

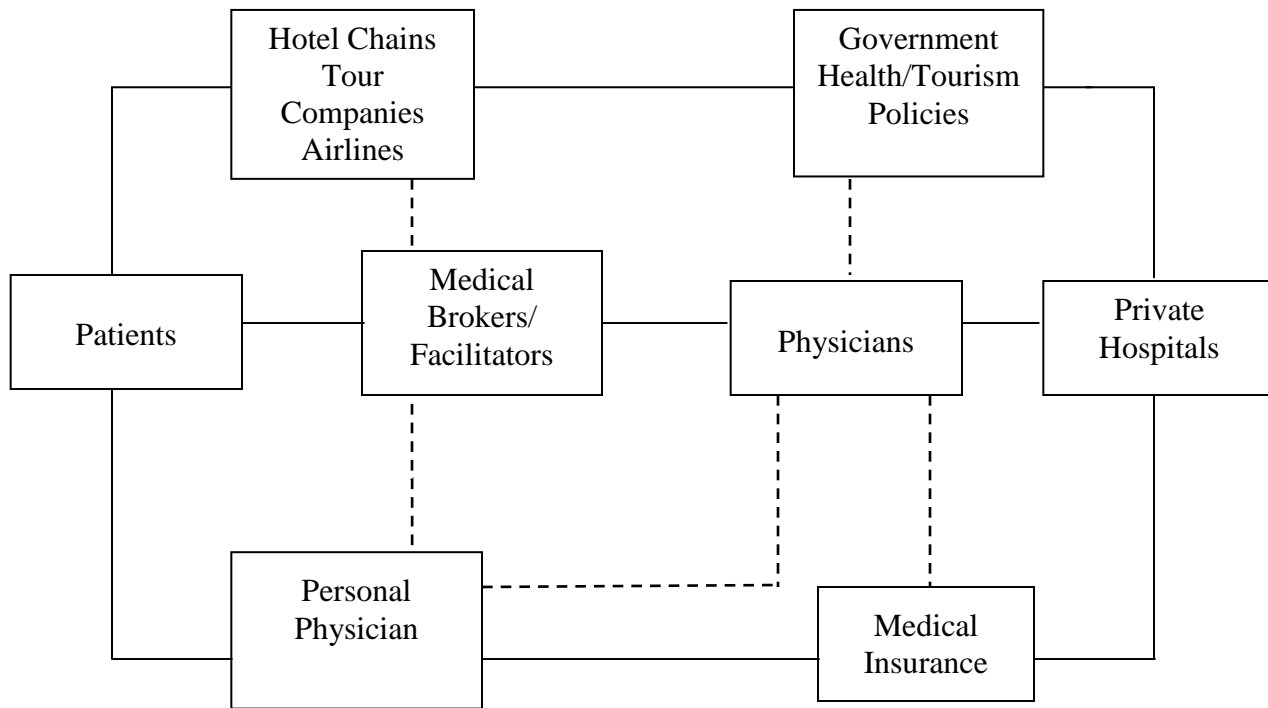


Figure 2.1 The Formal Medical Tourism Industry

Source: Author, adapted from a figure created by Crush, J., Chikanda, A., & Maswikwa, B.

THE WHY

If *what* is being sought in medical tourism varies considerably, and *who* partaking in medical tourism is not always completely clear, there is at least greater consensus on the *why*.

The motivations for medical tourism, although varying with each individual, usually derive from a short list: affordability (lower cost), accessibility (reduced wait times), availability (services not offered domestically) and quality (services superior to what is available domestically). The industry that has grown up to meet this demand (if not also to create it) is increasingly linked with tourism activities to ease ‘patients without borders’ into new cultural environments and to occupy them and their travel companions during the pre- and post-operative periods.

Casual perusals of web sites for medical tourism, whether managed directly by the provider or by a medical tourism broker, cast little doubt on the prospective market: higher-income English-speaking people from the North. Cost is one of the main advertising lures, with countries in the South holding substantial cost-advantages to those in the North (see Table 2.1). Lower labour and living costs, the availability of inexpensive pharmaceuticals and the low cost or absence of malpractice insurance allow many developing countries to offer some procedures at 10 percent of the American price, inclusive of travel and accommodation. Similar price differences exist for other developed nations. A shoulder operation performed privately in the UK would cost €10,000, compared to only €1,700 in India, with only a little over a week's wait time in India from the initial contact (Sengupta & Nundy, 2005). A recent cost analysis based on surgical procedures for 15 non-acute health problems estimated annual savings (US Medicare vs. developing country facility) of US\$1.4 billion (Mattoo & Rathindran, 2006). If coronary artery bypass surgery (CABG) were included, the cost savings would be over US\$2 billion annually. A more inclusive list of procedures for which north-based consumers are known to travel abroad would have produced a substantially higher estimate of savings.

Cost is one of the most frequently cited reasons medical tourists give for seeking healthcare outside of their countries (Alsharif, Labonté & Lu, 2010; Crooks, Snyder, Johnston & Kingsbury, 2011), although uninsured Americans, sometimes thought to be a potential market, are less likely to consider medical tourism than are Americans who are insured or higher-earning (Deloitte Center for Health Solutions, 2010). Similarly, higher-earning Canadians are more likely to report willingness to travel internationally for elective or medically necessary surgery (Deloitte Center for Health Solutions, n.d.). Despite cost-advantages, medical tourism to developing country destinations remains primarily an option for those who can afford it.

Table 2.1 Cost of Selected Procedures in Various Countries around the World (US\$)

Medical Procedure	USA	Mexico	South Africa	Costa Rica	India	Thailand	Korea
Angioplasty	57,000*	17,100	14,447	14,000	10,000	9,000	21,600
Heart Bypass	144,000*	21,100	50,000	26,000	10,000	26,000	26,000
Heart Valve Replacement	170,000*	31,000	40,000	31,000	3,000	24,000	38,000
Knee Replacement	50,000*	11,500	25,000	12,000	9,000	14,000	19,800
Hip Resurfacing	30,000*	13,400	---	13,000	10,000	18,000	22,900
Hip Replacement	43,000*	13,800	20,000	13,000	10,000	16,000	18,450
Special Fusion	100,000*	8,000	---	16,000	14,000	13,000	19,350
Face Lift	15,000*	8,000	6,120	6,500	9,000	8,600	5,000
Breast Implants	10,000*	9,000	7,000	4,000	6,500	5,700	13,600
Rhinoplasty	8,000*	5,000	5,686	6,000	5,500	5,400	6,000
Lap Band/Bariatric	30,000*	9,200	---	9,000	9,500	14,000	11,500
Hysterectomy	15,000*	7,500	---	6,000	7,500	7,000	11,000
Dental Implant	2,000 - 10,000*	1,000	---	1,100	1,000	1,000	2,000

Source: MedicalTourism.com <http://www.medicaltourism.com/en/compare-cost.html>

Note: * Up to Prices for countries other than the US are approximate and not actual prices and do not include estimated airfare for patient and companion.

Note: Data for South Africa was compiled from Medical Tourism Association Survey, 2010; Medical Tourism Websites

The reputation of physicians and quality of the facilities compete with cost for most frequently cited reasons for medical travel. Reputation and quality are prominent in web-sites which, whenever possible, reference the Western licensing and training of medical facilities, and

their facilities' international accreditation by the Joint Commission on Accreditation for Healthcare Organizations (JCAHO) through its affiliate, Joint Commission International (JCI). JCI has been responsible for accrediting more than 400 medical facilities in over 50 countries across Asia, Europe, the Middle East, the Caribbean and South America (Joint Commission International, n.d.). This represents a near 4-fold increase over the past decade, reflecting in part the growing popularity of medical tourism (Forgione & Smith, 2007). A number of developing country medical facilities have also partnered with Western medical teaching facilities and hospitals to signal quality to prospective medical consumers with prestigious and familiar names. Both Harvard Medical International and the Mayo Clinic are partnered with the Dubai Healthcare City. Wockhardt Group medical facility, one of the prominent chains of private healthcare facilities in India, has affiliated with Harvard Medical International. Their main competitor in India, the Apollo Hospitals group, partners with Johns Hopkins Medicine International^{4, 5}.

Apart from cost motivations (either self-paying or via private health insurers), medical travellers to facilities in developing countries sometimes pursue technologies and procedures that are not yet available or approved in their home countries. Until 2006, hip resurfacing, a less invasive alternative to hip replacement (Food and Drug Administration, 2008), was not approved in the US, although it was available in Canada, Europe and in some (much lower cost) Asian destination countries. In India, the Wockhardt Group of hospitals claims to have been the first in the world to perform COPCAB (conscious, off-pump coronary artery bypass), a heart surgery designed for individuals who are not good candidates for surgery using anesthesia (Dunn, 2007). Medical travellers from the developed world sometimes also seek medical procedures that are unavailable domestically due to legal constraints, which may include transplantation using living

donors who are motivated by poverty or assisted reproduction using legally restricted technologies or paid surrogates.⁶

Several countries specifically advertise transplantation tourism, notably Colombia, India, Pakistan and the Philippines; although China, Bolivia, Brazil, Iraq, Israel, Moldova, Peru, South Africa and Turkey are also significant exporters of commercially donated organs (Shimazono, 2007; Turner, 2008). Normatively, cross border organ transplantation is deemed 'transplant tourism' only when travel for transplantation 'involves organ trafficking and/or transplant commercialism or if the resources (organs, professionals, and transplant centres) devoted to providing transplants to patients from outside a country undermines the country's ability to provide transplant services for its own population (Declaration of Istanbul, 2008). While all countries, except Iran, have banned payment for organs, 'reasonable reimbursements' for costs related to organ donation or financial 'donations' to those offering their organs are permitted in many jurisdictions, effectively bypassing such legal restrictions (Turner, 2008). The Iranian exception is reported to have stringent rules on 'non-related living donor' exchanges to prevent abuses related to socioeconomic need or exploitation of vulnerable populations (Major, 2008), although anecdotal evidence suggests that economic need may still drive some donors to participate.

The majority of transplantations occur between live unrelated donors who are motivated by financial incentives (driven by extreme poverty) and individuals from affluent countries (with the ability to purchase) (Khamash & Gaston, 2008; Budiani-Saberi & Delmonico, 2008; Epstein, 2009). While donors from the South might technically consent to this transfer, the practice is deemed to be implicitly and explicitly coercive due to the fact that it involves vulnerable populations (Noorani, 2008; Cohen, 1999; Phadke & Anandh, 2002). Both China and India are

considered ‘hotspots’ in organ trafficking (Turner, 2009). In China, 90% of all organs come from executed prisoners (Huang, 2007) although this may now be decreasing (Huang, Mao & Millis, 2008) due partly to international pressure. New protocols have been implemented to bring organ donation more in line with stringent medical and ethical policies in other countries (Huang, et al., 2008) although independent investigations cast some doubt on compliance with these policies claiming that deliberate ‘harvesting’ of organs from prisoners (notably practitioners of Falun Gong) is still occurring.⁷ The Indian government, despite legislation restricting the commercial sale of organs, has been unable to monitor what is considered to be a sizeable market in illegal organ trade (Muraleedharan, Jan & Prasad, 2006). In Pakistan, where the transplantation tourism industry is unofficially sanctioned, over 2,000 kidney transplants are performed each year on foreign patients (Naqvi, Ali, Mazhar, Zafar & Rizvi, 2007). Although some contend that a seller’s decision to avoid extreme poverty in a properly regulated and remunerated market should not be denied (Bakdash & Scheper-Hughes, 2006), the health status for the majority of financially-motivated donors worsens after the procedure, costing them more in lost employment or out of pocket remedial care than the (usually) minimal ‘donation’ they receive for offering their organ to a broker (Naqvi et al., 2007). Donors can also be subject to extreme forms of social ostracism (Scheper-Hughes, 2002). Of all forms of medical tourism, transplantation tourism raises the largest number of immediate ethical questions.

THE WHERE

Where do the medical travelers come from and where to do they go? The US-based Medical Tourism Association in a recent guidebook claims it is not possible to answer this question because “patients are travelling for medical tourism to and from almost every single

country in the world” (Stephano & Edelheit, 2010, p. 21). This may (or may not) be true, with one recent estimate of approximately 50 countries offering some form of healthcare to international patients (NaRanong & NaRanong, 2011), and the Medical Tourism Association itself listing approximately 60 countries. Some of the pathways, however, are becoming better known and documented. These routes have been described and categorized as North-North (flows between developed countries north of the equator); South-North (the more traditional flows from developing to developed countries); South-South (the often ignored flows between developing countries south of the equator); and North-South (the newer flows from developed to developing countries). Although these routes are somewhat oversimplified, they are based for the most part on a characterization of the development status of nations, with an understanding that some southern medical tourism source and destination countries are highly developed while several northern source and destination countries share economic characteristics with many of the poorer countries in the south. As a heuristic, however, these compass ordinals serve as useful starting points.

North-North flows

The North-North route generally encompasses travel from one high-income country to another. The majority of this traffic occurs between nations of the EU. National boundaries became substantially more porous with the creation of the EU, with one outcome being an increase in cross border healthcare, primarily involving adjacent countries (Ninian, 2008). Although medical tourism within the EU remains in its infancy, accounting on average for only 1 percent of annual public healthcare spending (Ninian, 2008), enhanced patient mobility within the EU suggests that this figure will rise. As one example, a 2002 poll found that to avoid

lengthy wait times 15 percent of British citizens indicated willingness to travel anywhere in Europe for medical care (Beecham, 2002).

This mobility is also almost certain to rise following a series of court cases challenging restrictions on cross-border care within the EU. As early as 1998, the European Court of Justice began to field court cases challenging the requirement of prior approval and refusal of reimbursement for cross-border care, arguing that these restrictions violated trade agreements on the movement of goods and services, including healthcare (Healy, 2009). Subsequent European Court of Justice cases established the right of EU citizens to obtain reimbursement for cross-border medical treatment sought as a result of excessive domestic waiting times. To formalize the operational aspects of this traffic, the European Commission drafted a Directive on patient rights in cross-border care (Ninian, 2008; Commission of the European Communities, 2008; The European Parliament and the Council of the European Union, 2011) that was approved by the European Parliament in February, 2011 (Council of the European Union, 2011). The Parliament affirmed the right of all EU patients to seek healthcare in any member state, but with some restricting provisions: costs will only be reimbursed to the level covered in the patient's own country, and countries can require prior authorizations if the service entails overnight hospitalizations or a risk to the patient or population. Such authorization, however, should be granted "when the patient cannot be given such treatment within a time limit that is medically justifiable, taking account of his current state of health and the probable course of the condition" (The European Parliament and the Council of the European Union, 2011, para.31). Individuals will not be reimbursed for procedures not funded domestically, preventing them from obtaining a treatment considered unethical or unsafe in their own country. EU member states have until July 2013 to write this new Directive into their national legislation.

The same potential for North-North cross-border care could exist between the US and Canada, but is constrained by fundamental differences in healthcare provision and financing. These differences have not precluded Canadians seeking healthcare in the US (and other developing country destinations),⁸ or Americans seeking some forms of care in Canada (notably less expensive prescription drugs) (CBC News, 2009).

South-North flows

The more historical medical route has been one of wealthy patients from poorer countries seeking state-of-the-art medical care in richer ones (the US, UK, other European nations). The dominant form of cross-border care in the 20th century, these flows continue but may be declining. The UK saw its numbers of in-bound medical tourists, many from the Middle East, peak in the 1970s and 1980s with the rush of petrodollars. The number has fallen somewhat since, in the wake of 9/11 anti-terrorism concerns and the development of more sophisticated treatment options within the Middle East region. A 2010 study, focusing on destination hospitals in London (the main UK destination point), estimated that in 2009, London likely received 130,000 outpatient visits by medical travelers, resulting in 7,800 foreign inpatient stays. These paying patients generated between €280 and €330 million in direct revenue and almost €300 million in additional (touristic) spending (Team Tourism Consulting, 2010). Proposed plans to increase the portion that National Health Service (NHS) trusts can earn and retain from private paying patients are leading some hospitals to begin recruiting wealthy foreign patients with one hospital chief executive officer (CEO) arguing that, in terms of the global private healthcare market, the UK is “way behind the US, the Germans, Indian companies and Malaysian hospitals” (Ramesh & Williams, 2010).

Germany, another destination and regarded as one of the UK's main global medical tourism competitors, is attracting foreign patients primarily from Russia and Central European countries. It will soon face competition from Poland, which is pursuing its own brand of medical tourism and recently established its Polish Medical Tourism Chamber of Commerce and Association of Medical Tourism. Polish facilities are often in the public sector, indicative of the blurring between private and public that medical tourism is creating. Presently focusing on dental and cosmetic surgery, Poland, with its EU accession, is planning to compete with more distant ('South') destinations for intra-European medical tourists (Lunt, et al., 2011).

South-South flows

These flows are characterized by medically motivated travel from one low- or middle-income country into another, although three major 'South' destinations (Singapore, Hong Kong and United Arab Emirates (UAE)) are, in fact, high-income countries. Many low-income countries lack a health system infrastructure with adequate provision for primary healthcare or specialized health treatments and procedures. Given an ability to pay and to travel, individuals from these locales may seek services in other countries. For wealthy individuals, destinations such as the US and Western Europe are desirable (the South-North flow), although over the past two decades countries such as the UAE, Jordan, Thailand and Singapore have made significant efforts to attract such persons (Lautier, 2008).

South-South medical travel (similar to North-North flows) is often region-specific. As one example: Regional medical travel is a common experience for Yemeni, since the treatment infrastructure for cancer, heart disease and other serious medical conditions does not exist within their own country. Exact numbers of Yemeni medical travellers are unclear but range from 40,000 to 200,000 annually (out of a population of 17 million). The most popular destinations for

Yemeni medical travelers are India and Jordan, with Mumbai in India being the least expensive and most common destination of choice. The North African country of Tunisia, as another example, has attracted an increasing number of medical tourists due to its relative sophistication in healthcare, and is thought to have the most potential for providing medical tourism services for Europeans and West African patients. In 2003, approximately 42,000 foreigners visited Tunisia for health purposes, 34,000 of whom were from neighbouring Libya (Lautier, 2008).⁹

For many Middle Eastern and North African medical tourists, Jordan remains the most popular destination due to its relatively sophisticated medical infrastructure and affordable rates. The World Bank ranks Jordan first for medical tourism in the region and fifth globally (Thomas White Global Investing, 2009). A survey of medical tourists in that country found that over 70 percent of the sample came from within the Middle Eastern region (Alsharif, et al., 2010). A slightly older study found that approximately 87 percent of Jordan's health service exports are provided to individuals from neighbouring countries. By one estimate, these foreign patients occupy roughly one-quarter of all available hospital beds (World Health Organization-Eastern Mediterranean Office [WHO-EMRO], 2005). This figure foreshadows the equity issue associated with medical tourism, since Jordan has only 1.9 hospital beds/1,000, well below the global average of 3.0/1,000 (WHO-EMRO, 2007). If paying foreign patients have a substantial claim on this scarce resource, what does this mean for access for poorer Jordanians? Jordan's pre-eminence as a medical tourism destination may also be under regional challenge: the UAE continues to expand and promote its US\$500 million Dubai Healthcare City complex, a high-end, tourism-linked set of facilities (Alsharif, et al., 2010) featuring what have become dubbed 'hospihotels' – private hospital rooms decked out in 5 star hotel luxury.

In the Latin American and Caribbean region, Cuba is a choice destination for many medical travellers, 80 percent of whom originate in neighbouring countries. To encourage medical tourism, the Cuban government formed *Servimed*, a company that facilitates foreign access to healthcare in Cuba; and continues to negotiate bilateral agreements with neighbouring nations to further attract foreign patients. Operating entirely within a public system (an anomaly in the privately dominated industry) Cuba's medical tourism also includes the provision of sophisticated healthcare at no cost to poor individuals within Latin America and other poor regions of the world as part of its international health solidarity work. One example, initiated in 2004, is surgery to reverse vision loss, which by 2008 had provided over 1,000,000 free interventions to poor persons from 32 countries. Over 260,000 surgeries were provided for free to foreign patients within Cuba, including all costs of patients getting to and from the country (Gorry, 2008).¹⁰

Other countries in the region are also striving to enter the market: Barbados, which presently has a facility specializing in fertility treatments but also wants to establish a medical tourism hospital for cardiac patients (PR Newswire, 2011); Guatemala, which purports to serve already over 500 medical tourists annually, many seeking radiation and stem cell therapy (CIDNEWSMEDIA.COM, 2011); Panama, which offers cosmetic surgeries, knee and hip replacements, dental care and cardiovascular surgery to about 3,000 medical travellers annually (Panama Medical Tourism, n.d.); Cancun, Merida and the Mayan Riviera in Yucatan, Mexico, promising investments of US\$50 million to refurbish or expand 10 hospitals and clinics already catering to foreign patients; and Costa Rica, for some years a destination for the controversial 'liberation' therapy to treat multiple sclerosis (MS). Medical tourism facilities in Mexico are frequented by Mexican émigrés who live and work (legally or informally) in bordering US

states. One study estimated that one million Californians seek medical and dental care and inexpensive prescription drugs in Mexico each year, about half of whom are Mexican émigrés who often lack US health insurance coverage (Stephano & Edelheit, 2010; Lunt, et al., 2011). Mexico is now looking to promote itself as a destination for patients coming from Canada, the US and Europe. In South America, medical travellers from neighbouring Bolivia, Peru and Ecuador frequently access Chilean health facilities (Cortez, 2008), although Peru is now entering the medical tourism business itself. Colombia is seeking to establish itself as a major South American player in the industry, although it is not known the extent to which it seeks regional flows as distinct from foreign patients from Canada, the US and Europe. Brazil is also becoming a major player, reportedly attracting 49,000 medical tourists in 2005. Its medical tourism websites, however, appear to target primarily American foreign patients and to promote the country's private hospitals. Ferreyra, in this volume, illustrates Argentina's similar attempts to secure a spot in the medical tourism complex.

Turning to Asia, just three countries (India, Thailand and Singapore) are estimated to account for 90 percent of all medical tourism within the continent, much of it regional in origin (NaRanong & NaRanong, 2011). India has been developing its medical tourism industry for over a decade, and is an established destination for patients from neighbouring countries such as Sri Lanka, Bangladesh, Nepal, Bhutan and Pakistan. In the late 2000s, an estimated 50,000 neighbouring Bangladeshi annually crossed borders for care in India (Whittaker, 2008). The prevalence of English in India's healthcare facilities also lends itself to aggressive marketing for foreign patients from English-speaking high-income countries (the UK, the USA, Canada, Australia). Regional flows are more evident in South East Asia, where Malaysia, Thailand and Singapore combined attracted over 2 million medical tourists in 2006-2007, generating US\$3

billion in revenues (Pocock & Phua, 2011). Most medical travelers to these three countries came from within the Association of Southeast Asian Nations (ASEAN) region, although Thailand saw the largest share of its foreign patients come from Japan.¹¹ Thailand remains the world's leader in medical tourism, treating over 1.5 million foreign patients in 2010 (twice the number of runner-up India), of which between 420,000 and 500,000 travelled specifically for medical treatment (NaRanong & NaRanong, 2011).¹² There is also brisk cross-border medical traffic between Indonesia and both Singapore and Malaysia; while Cambodians unable to access high quality care in their country often seek it in Vietnam (Pocock & Phua, 2011).

Cost is a factor in these South-South health migrations, as it is in the North-South flow discussed below. But more often it is access to quality care or to services that simply are unavailable in medical travelers' own countries.¹³ This poses two dilemmas. First, as an ethnographic review of medical travel originating in Yemen relates poignantly, families are often forced to sell property, including land, livestock, and jewels, and to borrow heavily from friends and family members to finance medical trips for competent and specialist care that they desperately need (Kangas, 2007). Second, the revenues earned by hospitals in Jordan treating Yemeni represent capital no longer available (as direct payments or through taxation) to develop the health systems of Yemen, entrenching a spiral of patients seeking healthcare outside their country. While individuals are able to get the care they need (though not without substantial personal cost if they are poor), there is less funding available to improve health systems in their own poorly serviced countries. There is also less political pressure to reform such health systems with medical tourism functioning as a 'safety valve' for unmet healthcare needs.¹⁴ To the extent that medical travellers represent a middle-class with the resources to finance their personal health journeys, their exit of the under-resourced public system in their own country further erodes the

basis of social solidarity that underpins the cross-subsidization (healthy to sick, rich to poor) of all publicly financed healthcare.

This dilemma does not preclude the potential advantages of pooling health resources in border areas, especially for poorer countries. An exploratory study of cross-border care collaboration between the resource-constrained settings of the border regions of Pakistan, Afghanistan, and Tajikistan could improve maternal and child health by exerting a multiplying effect on present (and inadequate) services (Walraven, Manaseki-Holland, Hussain & Tomaro, 2009). Stakeholder interviews affirmed the feasibility of attempting such provision, although it remains to be tested empirically.

North-South flows

The flow that has captured most attention recently is the gold rush of primarily private, but also some public, providers in low- and middle-income countries attempting to capitalize on what they perceive to be an unfilled demand from the wealthier and demographically aging North. The growth of such facilities is attributed, in part, to observations of private patient hospitals in the US (and to a lesser extent private wings in UK facilities) catering to wealthy fee-paying patients through an emphasis on quality and consumer-focused service. While Asian countries were first to embrace this new healthcare industry, many Middle Eastern and several South American countries have begun aggressively promoting a range of medical tourism services to markets well beyond their regions. Although all high-income countries are the foci of such outreach, the US, “by being one of the only countries that does not have socialized or nationalized medicine,” is “one of the biggest targets for medical tourism” (Stephano & Edelheit, 2010). By one leading medical brokerage’s assessment, at least 42 foreign medical sites have

been deemed to provide value and quality for American patients travelling abroad (Patients Beyond Borders, n.d.; Deloitte Center for Health Solutions, 2009).

Empirical data on the North-South flow (how many are going from which country to which destination) is sketchy, but some evidence is slowly trickling in. Medical tourism to South Africa is dominated by people travelling from within the continent, but also records substantial numbers coming from the UK, other European countries, the US and Australia.¹⁵ A recent study of 770 patients travelling to four destination countries (India, China, Jordan and the UAE) found that the majority of medical tourists to India and China came from the North, although the pattern reversed for Jordan and the UAE (Alsharif, et al., 2010). The Bumrungrad Hospital in Thailand, which advertises over 200 US certified physicians, claims to have treated 55,000 patients from the US (De Arellano, 2007). Between 10 and 15 percent of India's medical tourists (variously estimated to fall between 150,000 and 500,000 annually) emanate from the US (Cortez, 2008.) The Deloitte consulting firm in its most recent ('recession-adjusted') estimate of the US medical tourism market concluded that 878,000 Americans sought healthcare outside their country in 2010, and projected this to rise to 1.6 million by 2012. Almost all of this medical travel will be to low- or middle-income countries (Deloitte Center for Health Solutions, 2010; Medical Tourism Association, 2011). Most observers also predict an increase in the North-South flow, as the wealthier population ages and healthcare costs and rationing risk extending wait-times. Not coincidentally, the majority of the medical travellers in the four-country study cited earlier were over 45 years of age (Alsharif, et al., 2010).

THE MULTINATIONAL BUSINESS OF MEDICAL TOURISM

Contemporary medical tourism is referred to in this book as an industry. This was a deliberate choice in terminology as its practice is primarily developing along the lines of a private, commercial enterprise. Both supply- and demand-side factors fuel its growth; one of them being the infusion of foreign direct investment into the private hospital chains seeking international patients. Destination countries, such as India and Thailand, but also ones trying to break into the market such as Indonesia and Nepal, have lowered restrictions on foreign direct investment in recent years, hoping to encourage growth in their commercial health sectors (Cortez, 2008; Chanda, 2007).

Thailand was among the first developing countries to enter the medical tourism market (Lunt, et al., 2011). It did so in response to a rapid growth in private hospitals in the 1980s that followed a government policy encouraging foreign direct investment. These hospitals were threatened with failure when the 1997 Asian financial crisis occurred at the same time as the government's '30 baht/visit' public health insurance scheme (a scheme designed to move many people away from the private to the public health sector) was introduced (Lunt, et al., 2011).¹⁶ In 2003, the Thai Government announced a campaign to ensure that the country would become the 'Medical Hub of Asia,' actively promoting a combination of its high-end medical treatment and its traditional spas, massage and herbal remedies. Medical tourism became the means to prop up demand for private providers and generated US\$2 billion in 2008 (NaRanong & NaRanong, 2011), equivalent to about 0.4% of the country's GDP. This is not a negligible sum, although it is hardly a driver of economic growth. In 2006, only one Thai hospital was JCI accredited: this number now stands at four, indicative of the surge that is occurring as well as Thai government policy to take on medical tourism as a means of accumulating foreign currency (Pocock & Phua,

2011). Public hospitals still outnumber private hospitals and are not involved in medical tourism, although medical tourism's draw on the country's aggregate health resources (notably healthcare providers) is substantial.

Singapore and Malaysia, two other popular ASEAN destinations, developed their medical tourism industries for reasons similar to those of Thailand. In Singapore's case it was also recognition that its own population base was insufficient to finance the high-end medical care it wished to establish and retain (Otley, 2007); fee-paying international patients would be required. The government has set a target of one million medical tourists by 2012 (Pocock & Phua, 2011). In Malaysia, medical tourism is viewed primarily as an industrial growth strategy rather than as an issue of healthcare access. Governments in both countries have been active in supporting industry growth through marketing, trade shows and, in the case of Malaysia, generous tax incentives. Private hospitals catering to medical tourists can double deductions for their marketing expenses and enjoy (as of 2010) a 100 percent tax holiday on revenues earned from treating foreign patients (Chee, 2010). Both countries have well developed public and private health systems, although growth in the latter is now outpacing expansion of the former. Similarly, in both countries, sovereign wealth funds are invested in private medical tourism – another instance of the blurring between public and private in this rapidly emerging industry. As concluded by two analysts, this represents “an apparent convergence in trade, tourism and health ministry priorities...reflective of growing acceptance of health as a private good globally” (Pocock & Phua, 2011, p. 6).

South Korea, a new competitor in the same region, is adopting similar policies of direct government promotion and subsidization of its medical tourism facilities, intending to develop 'health cities' along the lines of Dubai. This support includes encouragement of for-profit

hospitals in special economic (tax-free) zones. About half of all health expenditures in South Korea are publicly subsidized, but most facilities, including hospitals and clinics, are private and out-of-pocket payments remain high (Chun, Kim, Lee & Lee, 2009). While targeting American and European markets, one of the government's strategies is to focus on Korean expats living in the US and New Zealand, encouraging them to seek treatment back 'home' (Lunt, et al., 2010).

As in Thailand, India's move into medical tourism was an outgrowth of economic interests within its private health sector. The Confederation of Indian Industry lobbied for an official government policy on medical tourism, which was adopted by the Indian state as part of its national health policy in 2002 (Saligram, 2009). The government subsidizes growth in this sector through tax and land concessions, duty and tax concessions on various imports, income tax holidays for those investing in the industry and special 'M' visas for medical tourists (Chanda, 2002; Saligram, 2009). It actively markets the country as a medical tourism destination ('Incredible India – the global healthcare destination'): a case in point being the involvement of many Indian government departments in a major medical tourism conference in Canada in 2009 (Runnels & Turner, 2011). The government also offers credit for hospitals with more than 100 beds (Chanda, 2002; Saligram, 2009) and subsidizes the training costs of physicians, the majority of whom work in the private healthcare sector (Chanda, 2002). The value of these public training subsidies to the private medical sector is estimated to be US\$100 million annually (Sengupta & Nundy, 2005). At least thirteen of India's private hospitals are now JCI accredited, with the sector dominated by three chains (Apollo, Wockhardt and Fortis). The largest is the Apollo Hospital chain with 43 hospitals and over 10,000 beds, reportedly treating 60,000 foreign patients from 55 countries between 2003 and 2008 (Saligram, 2009). It has established partnerships with tourism and insurance businesses, and developed bilateral agreements with the

governments of Tanzania and Mauritius to treat their citizens (Whittaker, 2008).¹⁷ The Apollo Chain is 12.5 percent owned by Malaysia's sovereign wealth fund (Chee, 2010).

Mexico presents an interesting Latin American case. It now has 11 JCI accredited hospitals, an increase from the 2 reported in 2008 (Vequist & Valdez, 2008). The country's largest private hospital chain, Grup Star Medica, partly owned by the world's wealthiest man (Carlos Slim Helu), is planning to invest US\$700 million or more to construct up to 15 more hospitals partly to attract patients from the US. The Texas-based Catholic not-for-profit hospital group, Christus Health, half-owns a recently established Mexican operation, CHRISTUS MUGUERZA[®], which operates 8 hospitals and is seeking to expand its medical tourism business (Vequist & Valdez, 2008). The Christus group differentiates itself from other medical tourism businesses by targeting Hispanics living in the US, and integrating its profit-making medical business with traditional Catholic charitable services to poorer populations.¹⁸ At the same time, its medical tourism side is run on a profit-seeking, 'high-volume market' basis (Christus Health, 2010.) In 2010 the Mexican Minister of Tourism announced his intent to make the country a major medical tourism destination with a goal of 450,000 medical tourists by 2015, and 650,000 by 2020. This follows a pattern in most destination countries: government support for the industry arises primarily from tourism or industrial development ministries, with ministries of health often a secondary or minor partner. Tourism ministries in Latin America in recent years have been partnering with the US-based Medical Tourism Association to fund 'Familiarization Tours,' in which insurance companies and medical tourism brokers, primarily from the USA, are hosted by private hospitals, local health insurers and government officials in an effort to strengthen referral networks (Stephano & Edelheit, 2010) (see Box: Medical Tourism Association).

Medical Tourism Association

The Medical Tourism Association, a non-profit organization, promotes the interests of healthcare provider and medical tourism facilitator members. It manages MedicalTourism.com, a “free, confidential, independent resource for patients and industry providers,” (MedicalTourism.com, 2011a), publishes the association’s trade journal, the *Medical Tourism Magazine*, and convenes annual conferences bringing together countries developing medical tourism industries, hospitals catering to international patients, broker firms and insurance companies.¹⁹ Its web-site lists close to 50 countries which are described as “the most popular medical tourism destinations around the world” (MedicalTourism.com, 2011b). These include G8 countries, France, Germany, UK, US and Italy. Canada is also listed but no details are available and the text on its web page suggests they are “coming soon” (MedicalTourism.com, 2011c). Other literature suggests that another G8 country, Japan, is showing an interest in developing medical tourism, with Italy yet to establish itself on the medical tourism map.

In addition to countries mentioned elsewhere in this volume, others listed on the medicaltourism.com website include the South American nations of Ecuador, which offers popular services including plastic surgery, orthopedics, bariatric surgery and dental procedures, and Guatemala, described as “a newcomer to the medical tourism industry” (MedicalTourism.com, 2011d). Another ‘newcomer’ is Greece, with Athens serving as the major centre and the government reportedly working on developing other popular tourist locations. The Philippines is promoted for its procedures which are available “for a fraction of the cost in developed countries” (MedicalTourism.com, 2011e). Advertised as “the underdog in the medical tourism industry,” (MedicalTourism.com, 2011f) Vietnam offers “health spas, cosmetic, bariatric, and dental procedures” (MedicalTourism.com, 2011f) which are reported as popular among medical tourists. However, the webpage for Vietnam does note that “cosmetic surgery is a relatively new phenomenon” (MedicalTourism.com, 2011f) and thus there is a lack of official controls on the practice.

The descriptions of many of the countries emphasize tourism over healthcare, suggesting that medical tourists first choose the country based on their interest in tourism (such as the Galapagos Islands in Ecuador), and then check into the medical services available.

THE INSURANCE ISSUE

Unsurprisingly, the private health insurance industry, notably American, is being encouraged to exploit the cost advantages of medical tourism (Deloitte Center for Health Solutions, 2008). Some economists argue that a combination of importing foreign trained health workers (something at which the US already excels) and exporting patients to developing countries is the simplest and most cost-efficient solution to its healthcare problems (Bhagwati & Madan, 2008). Medical tourism brokerages operating out of the US (Planet Hospital and Med Retreat, as examples) have started negotiating with insurance providers to develop policies for their client/patients, recognizing that the non-portability of insurance coverage poses one of the most significant barriers to the growth of medical tourism (York, 2008). Both self-insured companies and large insurance firms are attracted to the low-cost provider networks offered by the medical tourism industry, but not without opposition. An attempt by a South Carolina company in 2007 to offer financial inducements to employees accepting treatment in India was rescinded after the union condemned the policy out of concern about lax overseas medical malpractice laws (Cortez, 2008; McLean, 2007; Higgins, 2007). An effort in 2006 to incorporate a similar policy in West Virginia for its state employees also failed (Turner 2007). At the same time, a European owned supermarket chain in the US successfully initiated a similar policy out of concern with the high costs of US-based healthcare (Carroll, 2008). More recently, Blue Shield of California and the health insurance company Health Net are now selling discounted health insurance policies that encourage patients to get most of their care in Mexico;²⁰ and insurers in three other US states (Florida, Wisconsin and South Carolina) have entered

agreements to insure patients at JCI-accredited hospitals in India and Thailand. Whether these small initiatives begin to diffuse across US healthcare more generally remains to be seen.

South-South flows also involve insurance portability issues. Singapore now allows (indeed encourages) its citizens to use their ‘Medisave’ accounts to access healthcare in Malaysia, which is considerably cheaper. Medisave is a legally mandated personal insurance program, with joint contributions paid by employers and employees. All contributions are tax-exempt, representing tax expenditures in the program by the Singapore State (Massaro & Wong, 1996). Again indicative of the confluence of public and private interests: Singapore residents wishing to maintain a health balance in their health insurance fund by using services in Malaysia may do so, but only at private hospitals in Malaysia that happen to be owned by Singapore private hospital chains (Chee, 2010).

The reluctance of private health insurers to more fully embrace medical travel is understandable. Even though quality of care and accreditation is improving in many developing country destinations (or so the JCI and hospital claims would attest), some countries have limited malpractice protection and weak mechanisms for medical liability or for pursuit of compensation claims.²¹ To date, there appears even less interest by public health insurers to accept the risks inherent in availing of the lower-cost ‘safety valve’ of medical treatments offered by developing country hospitals, regardless of accreditation. The lack of insurance portability may be the greatest single damper on growth in medical tourism;²² as one indication, a survey of Canadians reported that 60 percent would travel internationally for healthcare if it was covered by public health insurance, but only 20 percent would consider such an option if it were self-paid (Deloitte Center for Health Solutions, n.d.).

THE MALPRACTICE ISSUE

The risks inherent in seeking healthcare outside their country apply to patients as well as to insurers. There is little or no independent statistical data on complication rates from medical procedures obtained in medical tourism destination countries, but anecdotal accounts of malpractice or medical misadventure are frequent in the literature (Newman, Camberos & Ascherman, 2005; Healy, 2009), including novel infections (some of which may be extensively drug-resistant (XDR) forms of diseases such as tuberculosis or ‘golden staph’) and post-operative complications. The subsequent financial costs borne by the public health systems of patients’ home countries are argued to be extensive (Jeevan & Armstrong, 2008). A lack or lax enforcement of malpractice laws in developing countries poses another risk. Little or no malpractice insurance costs allow developing country practitioners and facilities to maintain low prices but leave medical tourists with few options if malpractice is suspected. In Singapore and Malaysia, courts overseeing malpractice suits defer to the opinions of attending physicians, essentially requiring a physician to ‘confess’ to malpractice in order for any compensatory damages to be awarded (Forgione & Smith, 2007).

THE HEALTH EQUITY ISSUE

Alongside the risks one must also set the benefits. For international patients wanting to jump queues or to obtain care otherwise not available to them, and assuming that care is both affordable and of high standards, the personal benefits are obvious. From the destination country perspective, the benefits are generally argued under the umbrella heading of ‘trickle down’ economics: the industry increases an inward flow of foreign currency which supports growth in

health, tourism and infrastructure industries, improving aggregate economic development and sophisticated healthcare facilities that eventually benefits the greater population (Smith, 2004; Bookman & Bookman, 2007). While the estimated annual earnings for four major Asian destinations and not (yet) huge, they are substantial (see Table 2.2). Moreover, the fact that these industries are in large part foreign owned means that little of the revenue remains in the country for public health purposes.

Table 2.2 Estimated Medical Tourism Earnings in Selected Countries

Country	Estimated earnings (US\$)	Major services provided
Thailand	1.1 billion (2006)	Cosmetic surgery, organ transplants, dental treatment, joint replacements
India	480 million (2005)	Cardiac surgery, joint replacements, eye surgery
Singapore	1.2 billion (2007)	Liver transplants, joint replacements, cardiac surgery
Malaysia	90 million (2008)	Cardiology, cardio- thoracic surgery, cosmetic surgery

Source: Adapted from ESCAP 2007; DiscoverMedicalTourism.com; Health-Tourism.com; Pocock and Phua (2011); Chee, 2010

Other claimed benefits include private investment in state-of-the-art medical technology, and a slow-down or reversal of the migration of medical professionals to developed countries. The Apollo group in India, for instance, claims to have attracted more than 123 expatriate medical professionals to return by offering more competitive salaries and the opportunity to live and work in their country of origin while still being able to practice advanced healthcare (Cortez, 2008). To put this figure into perspective: it represents just 10 percent of the number of Indian-trained physicians entering US medical residencies each year (Mullan, 2006) and scarcely a dent in the estimated need for 800,000 more physicians in India over the next decade (Otley, 2007).

Moreover, these benefits may be overshadowed by costs in healthcare access for local people. Policies and regulations which would ensure that revenues generated through medical tourism are taxed sufficiently and reinvested back into public healthcare are absent or unenforced in most developing nations (Sengupta, 2008); and benefits purported to occur from medical tourism have yet to be realized by the majority of the population of such countries. In India, private hospitals catering to both national and foreign fee-paying patients that received lucrative land and tax concessions from the government are obliged to provide 10 percent of inpatient and 25 percent of outpatient beds for free use by the poor (Saligram, 2009). However, there is little evidence that such beds are actually made available (Connell, 2008). A 2005 report by the Indian Government's public accounts committee found that many Delhi hospitals were non-compliant with this obligation, and concluded that "what started with a grand idea of benefiting the poor turned out to be a hunting ground for the rich in the garb of public charitable interests" (Shetty, 2010, p. 672). In September, 2011, a Supreme Court in India ruled that private hospitals in Delhi serving national and foreign patients were, indeed, bound by their agreements to operate on public lands to make these beds available. Several of the hospitals had argued that illnesses such

as cancer and cardiovascular disease were too costly to treat for free (Headlines Today Bureau, 2011). Even assuming there is compliance with this ruling, access to healthcare for the majority of India's poor remains costly and highly inadequate.

In Thailand, the high quality medical care that is available to medical tourists remains financially out of reach for the majority of the Thai population (Saniotis, 2007). Thailand also provides evidence for another concern: that medical tourism will weaken public healthcare by incentivizing an internal brain drain of providers to private facilities that offer higher salaries and better working conditions. Almost 6,000 positions for medical practitioners in Thailand's public system were unfilled in 2005, as an increasing number of physicians (already undersupplied in the country) followed the higher wages and more attractive settings available in private care (Saniotis, 2007). The Thai Rural Doctors Society blames foreign medical expansion for this drift, complaining that Bangkok (where most private hospitals for international patients are located) already has eight times the number of doctors/capita than poorer served rural provinces (Chambers, 2011). For countries such as Ghana, Pakistan and South Africa, which lose approximately half of their medical graduates every year to external migration, the addition of internal brain drain from public to private healthcare can be especially damaging (Cortez, 2008).

A further financial burden to the public is the cost of training medical practitioners who end up working in the medical tourism industry. In India, medical professionals are trained in highly subsidized public facilities (Sengupta & Nundy, 2005). The annual value of these public training subsidies to the private sector where many physicians eventually work is estimated at over US\$100 million (Sengupta & Nundy, 2005), at least some of which accrues to the medical tourism industry (Sengupta, 2008). This diverts public funds to private care for more affluent individuals that might otherwise have gone into improving public healthcare provision for the

poor. This is a particular concern in India, where public health expenditures are very low even by developing country standards, and where almost all growth in the sector is now driven by the private enterprise (Chanda, 2007). Similar arguments have been made about Thai health workers whose training is heavily tax-subsidized being unavailable to provide services to those who pay the taxes (NaRanong & NaRanong, 2011). Finally, there are concerns that medical tourism imposes a specific Western biomedical model on developing nations, which may undermine culturally specific and traditional approaches to healing and wellness (Saniotis, 2007); or give greater emphasis to acute or tertiary care over preventative or primary care.

The global entrenchment of two-tiered healthcare arising in the wake of medical tourism poses the broader and larger health equity concern. The UAE, for example, is designated a high-income country but it has very low overall healthcare spending (0.6% of GDP and 7% of total public spending in 2002) (World Health Organization – Eastern Mediterranean Regional Office [WHO-EMRO], 2006). Its public system, which finances 81% of healthcare spending (United Arab Emirates Ministry of Health, 2010), provides just one bed, 0.33 doctors and just over one nurse per 1,000 population; very low by international standards. The country, like Jordan, has a shortage of qualified healthcare workers (WHO-EMRO, 2006) and is expanding rather than contracting the privatization of its healthcare systems, partly to attract international patients. The crowding out of local access to a very low supply of hospital beds by medical travellers to Jordan has already been commented on. Such crowding out takes on even more significance given a study in Thailand that estimated that the medical resources required to treat one foreign patient were equivalent to what would be needed to treat four or five Thai patients (Wilbulproasert , Pachanee, Pitayarangsarit & Hempisut, 2004).

CONCLUSION

Medical travel may not be new, but the shape it is now taking does differ from earlier eras. Our review of existing searchable knowledge about the ‘what, who, why and where’ medical tourism allows several summary points:

- a shift in the flows with developing countries becoming more prominent destinations competing for wealthier patients from neighbouring nations or developed countries, notably the US
- an emerging consensus that these flows are likely to increase as demographic pressures in advanced economies create more wait-time problems in public healthcare facilities
- the creation of major ‘health cities’ in many destination countries offering a large range of state-of-the-art medical and surgical services
- persisting ethical issues related to who benefits most, and how controversial procedures such as organ transplantation or surrogacy might be better managed
- the balance, if any can be achieved, between the global and entrepreneurial nature of private medical tourism and the national and redistributive aims of public health systems

These themes are taken up in many of the chapters in this book. And while there is a growing literature on these issues, the most striking conclusion of our overview is the lack of hard data on the magnitude of medical tourism, with anecdotes, brokerage claims and theoretical conjectures standing in for more deliberative study.

There is a significant lack of reliable data on the scale of the revenues generated, both directly and indirectly, and on detailed accounts of who is benefiting and who may be losing (if at all) from the likely (though not definitively established) growth of this industry. National health and economic statistics can assist in developing metrics of public/private revenues, benefits and aggregate welfare gains arising from medical tourism, although detailed within-country studies would be needed to ascertain the distributional impact of net health gains and losses. Some measure of patient flows could be estimated from data collected by medical tourism brokerages or destination country healthcare facilities; but such information may be considered confidential or the companies involved may be unwilling to release it. Surveys of patients obtaining cross-border care are other potential sources of useful data, but this again requires the cooperation of medical tourism facilities.

In brief, obtaining a competent empirical handle on the nature of this industry will not be easy. Moreover, any new research on medical tourism should also locate its questions and analyses within the broader frame of global health sector reform, which for the past several decades has been characterized by decreasing public or not-for-profit provision and increasing private sector involvement which the weight of evidence suggests is not well-regulated and is highly inequitable in access and impact (Gilson, Doherty, Loewenson & Francis, 2007; World Health Organization, 2008).

At base, the key question about medical tourism is whether the ability of elites to benefit from it imposes costs on access for poorer groups. That this question underpins many other aspects of health systems and policy, and indeed of contemporary globalization itself, does not make it any less important or urgent to address.

¹ See the Chapters by Chanda and Blouin, this volume.

² This is sometimes the case; and even if not, the planned tourist activities may be compromised by complications or by the severity of the procedure being sought by foreign patients. See the Chapter by Johnston, Crooks and Snyder, this volume.

³ See the Chapter by Labonté, this volume, for an account of a 2011 medical tourism conference.

⁴ More detailed discussion of these partnerships can be found in the Chapters by Crush, Chikanda and Maswikwa (South Africa); Chanda (India); and Ferreyra (Mexico), this volume.

⁵ Interestingly, the four destination country survey found that fewer than half of respondents rated accreditation or affiliation with an American or European hospital as an ‘important’ or ‘very important’ factor in choosing medical tourism (Alsharif, Labonté and Lu, 2010).

Accreditation and brand affiliation are nonetheless considered to be important by providers and governments supporting the growth of medical tourism in developing countries.

⁶ See the Chapter on reproductive tourism by Deonandan, this volume.

⁷ For more information, see the Matas/Kilgour Release New Evidence on Organ Harvesting in China article at <http://organharvestinvestigation.net/release/pr-2008-08-22.htm>.

⁸ See the Chapter by Hopkins, this volume, for a description of a patient seeking healthcare outside her country with reference to bariatric surgery; and to the Chapter by Runnels and Packer for a discussion of administrative and legal issues pertaining to Canadians seeking to have out of country care (OCC) approved by their provincial public health insurance programs.

⁹ It is not known what impact the ‘Arab Spring’ of 2011 has had on such patient flows, although a business report claimed that over 250,000 medical travelers visited Tunisia in 2009. See Stephano & Edelheit, 2010.

¹⁰ For a sympathetic yet critical review of Cuban medical tourism, see the Chapter by Ferreyra, this volume.

¹¹ The Japanese government is attempting to grow its own medical tourism industry and has relaxed entry visas for this purpose, but the low ratio of physicians/population and the high cost of treatment militate against this (Lunt et al, 2011).

¹² Many of the foreign patients (the higher 1.5 million figure) were expats or tourists and so are not considered medical tourists. The lower figure for medical tourists is still significant, since an important point about medical tourists is that they generally seek more intensive forms of care than the routine health services provided to expats or regular tourists, and so place more strain on a country's medical resources.

¹³ An interesting exception arising from the four-country study was the UAE (Alsharif, et al., 2010), where privacy was cited as the most important reason for seeking care in that country. Given that this was the one destination country in this study where women medical tourists outnumbered men by 2:1, the emphasis on privacy may have something to do with gender politics in the source countries of these women. All but 4 of the 34 female respondents in the UAE sample came from an Arabic country. In 2007 the UAE ranked 25th on the UN Gender Empowerment Measure (comprised of economic and political participation/decision-making and control over economic resources), while ranks for the primary source countries of its (many female) medical tourists, Oman, Qatar and Yemen, were 87, 88 and 109 respectively (UN Gender Empower site: <http://hdrstats.undp.org/en/indicators/125.html>, Accessed June 4 2010).

¹⁴ This 'safety valve' function is particularly highlighted in Canadian OOC, described in the Chapter by Runnels and Packer, this volume.

¹⁵ See the Chapter by Crush, Chikanda and Maswikwa, this volume.

¹⁶ See the Chapter on trade treaties and medical tourism by Blouin, this volume. Unlike other ASEAN countries, and certainly unlike India, the majority of health spending in Thailand is public (approximately 75 percent), and has been rising as a share of total spending since 2002 (Pocock & Phua, 2011).

¹⁷ See the Chapters by Deonandan for an account of surrogacy tourism in India, and by Chanda for an overview of the Indian health system and prospects for medical tourism growth, this volume.

¹⁸ See the Chapter by Ferreyra, this volume, for a discussion of this particular hospital group.

¹⁹ See the Chapter by Labonté, this volume, for an account of the 2011 Medical Tourism conference.

²⁰ See the Chapter by Ferreyra, this volume.

²¹ See the Chapter by Chanda, this volume, for a discussion of insurance limitations as they apply to India's medical tourism industry.

²² See the Chapter by Blouin, this volume.

REFERENCES

- (2008, August 22). Matas/Kilgour Release New Evidence on Organ Harvesting in China. [Press Release]. Retrieved December 1, 2012 from <http://organharvestinvestigation.net/release/pr-2008-08-22.htm>.
- Alsharif, M. J., Labonté, R., & Lu, Z. (2010). Patients beyond borders: A study of medical tourists in four countries. *Global Social Policy, 10*(3), 315-335.
- Bakdash, T., & Scheper-Hughes, N. (2006). Is it ethical for patients with renal disease to purchase kidneys from the world's poor? *PLoS Medicine, 3*(10), 1699-1702(e349).
- Beecham, L. (2002). British patients willing to travel abroad for treatment. *British Medical Journal, 325*(7534), 10.
- Bhagwati, J., & Madan, S. (2008). Comprehensive healthcare in US can be realised [Letter to the editor]. *FT.com*. Retrieved December 1, 2012 from http://www.ft.com/cms/s/0/fc8a870a-d091-11dd-ae00-000077b07658.html?nclick_check=1.
- Bookman, M., & Bookman, K. (2007). *Medical tourism in developing countries*. New York: Palgrave McMillan.
- Budiani-Saberi, D. A., & Delmonico, F. L. (2008). Organ trafficking and transplant tourism: A commentary on the global realities. *American Journal of Transplantation, 8*(5), 925-929.
- Bumrungrad International Hospital. (n.d.). [Website] Retrieved December 1, 2012 from <http://www.bumrungrad.com/en/about-us/overview>.
- CBC News. (2009). Prescription drugs: more business for Canadian online pharmacies? CBC News Health. Retrieved December 1, 2012 from <http://www.cbc.ca/news/health/story/2009/02/27/f-onlinedrugs.html>.

- Carroll, J. (2008). Aetna and Hannaford make a Singapore connection. *Managed Care*, 17(3), 44-47.
- Chambers, A. (2011, March 6). Thai embrace of medical tourism divisive. *The Guardian Weekly*, p. 46.
- Chanda, R. (2002). Trade in health services. *Bulletin of the World Health Organization*, 80, 158-162.
- Chanda, R. (2007). *Foreign investment in hospitals in India: Status and implications*. India: Ministry of Health and Family Welfare and WHO Country Office.
- Chee, H. L. (2010). Medical tourism and the state in Malaysia and Singapore. *Global Social Policy*, 10(3), 336-357. =
- Christus Health. (2010). *Embracing miracles: Touching lives: 2010 annual report*. Retrieved December 1, 2012 from http://www.christushealth.org/workfiles/pdf/community_ben2010.pdf.
- Chun, C. B., Kim, S. Y., Lee, J. Y., & Lee, S. Y. (2009). Republic of Korea: Health system review. *Health Systems in Transition*, 11(7), 1-184. Connell, J. (2008.) Tummy tucks and the Taj Mahal? Medical tourism and the globalization of health care. In A. G. Woodside & D. Martin (Eds.), *Tourism management: Analysis, behaviour and strategy* (p. 232-244). King's Lynn UK: Biddles.
- CIDNEWSMEDIA.COM. (2011, March 21). Guatemala innovate in health services export. *Medical Tourism Magazine Newsletter* [online]. Retrieved December 1, 2012 from <http://www.medicaltourismmag.com/newsletter/57/guatemala-innova-en-la-exportacion-de-servicios-de-salud.html>.
- Cohen, L. (1999). Where it hurts: Indian materials for an ethics of transplantation. *Daedalus*, 128(4), 135-165.

- Commission of the European Communities. (2008). *Proposal for a directive of the European Parliament and of the Council on the application of patients' rights in cross-border health care* [Brussels, 2.7.2008 COM(2008)414 final. 2008/0-142 (COD)]. Retrieved December 1, 2012 from http://ec.europa.eu/health/ph_overview/co_operation/healthcare/docs/COM_en.pdf.
- Cortez, N. (2008). Patients without borders: The emerging global market for patients and the evolution of modern health care. *Indiana Law Journal*, 83, 71-132.
- Council of the European Union. (2011, February 28). *Directive on cross-border healthcare adopted* [Press release]. Retrieved December 1, 2012 from http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/lsa/119514.pdf.
- Crooks, V. A., Snyder, J., Johnston, R., & Kingsbury, P. (2011, September). *Perspectives on Canadians' involvement in medical tourism* [Final Research Report]. Burnaby: Department of Geography, Simon Fraser University.
- De Arellano, R. (2007). Patients without borders: The emergence of medical tourism. *International Journal of Health Services*, 37 (1), 193-198.
- Declaration of Istanbul. (2008). Organ trafficking and transplant tourism and commercialism: The Declaration of Istanbul. Steering Committee of the Istanbul Summit. *Kidney International*, 74(7), 854-859.
- Deloitte Center for Health Solutions. (2008). *Medical tourism: Consumers in search of value*. Retrieved December 1, 2012 from [http://www.deloitte.com/assets/Dcom-Croatia/Local%20Assets/Documents/hr_Medical_tourism\(3\).pdf](http://www.deloitte.com/assets/Dcom-Croatia/Local%20Assets/Documents/hr_Medical_tourism(3).pdf).

- Deloitte Center for Health Solutions. (2009). *Medical tourism: Update and implications*. Retrieved December 1, 2012 from http://www.deloitte.com/assets/Dcom-UnitedStates/Local%20Assets/Documents/us_chs_MedicalTourism_102609.pdf.
- Deloitte Center for Health Solutions. (2010). *2010 survey of health care consumers: Key findings, strategic implications*. Retrieved December 1, 2012 from http://www.deloitte.com/assets/Dcom-UnitedStates/Local%20Assets/Documents/US_CHS_2010SurveyofHealthCareConsumers_050610.pdf.
- Deloitte Center for Health Solutions. (n.d.). *Evolving medical tourism in Canada: Exploring a new frontier*. Retrieved December 1, 2012 from http://www.deloitte.com/assets/Dcom-Canada/Local%20Assets/Documents/Public%20Sector/ca_en_ps_evolution_medical_tourism_052511.pdf.
- Dunn, P. (2007). Medical tourism takes flight. *Hospitals and Health Networks*, 81(11), 40-44.
- Ehrbeck, T., Guevara, C., & Mango, P. D. (2008, May). Mapping the market for medical travel. *McKinsey Quarterly*. Retrieved December 1, 2012 from http://www.mckinseyquarterly.com/Mapping_the_market_for_travel_2134
- Epstein, M. (2009). Sociological and ethical issues in transplant commercialism. *Current Opinion in Organ Transplantation*, 14(2), 134-139.
- Food and Drug Administration. (2008). *Birmingham Hip Resurfacing System Approval* [letter]. Retrieved December 1, 2012 from http://www.accessdata.fda.gov/cdrh_docs/pdf4/p040033a.pdf.
- Forgione, D. A., & Smith, P. C. (2007). Medical tourism and its impact on the US health care system. *Journal of Health Care Finance*, 34(1), 27-35.

- Gilson, L., Doherty, J., Loewenson, R., & Francis, V. (2007). *Challenging inequity through health systems*. [Final Report of the Knowledge Network on Health Systems]. Geneva: World Health Organization.
- Gorry, C. (2008). Sight for sore eyes: Cuba's vision restoration program. *MEDICC Review (International Journal of Cuban Health and Medicine)*, 10, 49-51.
- Headlines Today Bureau. (2011, September 1). Supreme Court tells private hospitals to provide free treatment to poor. *India Today*. Retrieved December 1, 2012 from <http://indiatoday.intoday.in/story/supreme-court-tells-private-hospitals-to-provide-free-treatment-to-poor/1/149695.html>.
- Healy, C. (2009). Surgical tourism and the globalisation of healthcare. *Irish Journal of Medical Science*, 178(2), 125-127.
- Higgins, L. A. (2007). Medical tourism takes off, but not without debate. *Managed Care*, 16(4), 45-47.
- Hopkins, L., Labonté, R., Runnels, V. & Packer, C. (2010). Medical tourism: What's the state of existing knowledge? *Journal of Public Health Policy* 31, 185–198.
- Huang, J. (2007). Ethical and legislative perspectives on liver transplantation in the People's Republic of China. *Liver Transplant*, 13(2), 193-196.
- Huang, J., Mao, Y., & Millis, M. M. (2008). Government policy and organ transplantation in China. *The Lancet*, 372(9654), 1937-1938.
- Jeevan, R., & Armstrong, A. (2008). Cosmetic tourism and the burden on the NHS. *Journal of Plastic, Reconstructive & Aesthetic Surgery*, 61(12), 1423-1424.

- Joint Commission International. (n.d.). *Joint Commission International Accreditation and Certification*. Retrieved December 1, 2012 from <http://www.jointcommissioninternational.org/Accreditation-and-Certification-Process/>
- Kangas, B. (2007). Hope from abroad in the international medical travel of Yemeni patients. *Anthropology & Medicine, 14*(3), 293-305.
- Khamash, H. A., & Gaston, R. S. (2008). Transplant tourism: A modern iteration of an ancient problem. *Current Opinion in Organ Transplantation, 13*(4), 395-399.
- Lautier, M. (2008). Export of health services from developing countries: the case of Tunisia. *Social Science and Medicine, 67*(1), 101-110.
- Lunt, N., Smith, R., Exworthy, M., Green, S. T., Horsfall, D., & Mannion, R. (2011). *Medical tourism: Treatments, markets and health system implications: A scoping review*. Paris: OECD.
- Major, R. (2008). Paying kidney donors: Time to follow Iran? *McGill Journal of Medicine, 11*(1), 67-69.
- Massaro, T. A., & Wong, Y-N. (1996, April). *Medical savings accounts: The Singapore experience*. [NCPA Policy Report No. 23]. Dallas: National Center for Policy Analysis. Retrieved December 1, 2012 from <http://www.bahamashealthcarereform.org/documents/singapore.pdf>.
- Mattoo, A., & Rathindran, R. (2006). How health insurance inhibits trade in health care: Eliminating the current bias in health plans against treatment abroad could lead to significant cost savings. *Health Affairs, 25*(2), 358-368.
- McLean, T.R. (2007). The industrialization of medical tourism and the Blue Ridge Paper claim [Commentary]. *Journal of Controversial Medical Claims, 14*(1), 18-19.

- Medical Tourism Association. (2011, June 2). *Medical tourism updates May 2011* [webinair]. Retrieved December 1, 2012 from <http://www.slideshare.net/reneemariestephano/mta-webinar-travel-update-may-2011>.
- MedicalTourism.com. (2011a). About us. *MedicalTourism.com*. Retrieved December 1, 2012 from <http://www.medicaltourism.com/en/about-us.html>.
- MedicalTourism.com. (2011b). Destinations. *MedicalTourism.com*. Retrieved December 1, 2012 from <http://www.medicaltourism.com/en/destinations.html>.
- MedicalTourism.com. (2011c). Canada. *MedicalTourism.com*. Retrieved December 1, 2012 from <http://www.medicaltourism.com/en/destination/canada.html>.
- MedicalTourism.com. (2011d). Guatemala. *MedicalTourism.com*. Retrieved December 1, 2012 from <http://www.medicaltourism.com/en/destination/guatemala.html>.
- MedicalTourism.com. (2011e). Philippines. *MedicalTourism.com*. Retrieved December 1, 2012 from <http://www.medicaltourism.com/en/destination/philippines.html>.
- MedicalTourism.com (2011f). Vietnam. *MedicalTourism.com*. Retrieved December 1, 2012 from <http://www.medicaltourism.com/en/destination/vietnam.html>.
- Mullan, F. (2006). Doctors for the world: Indian physician emigration. *Health Affairs*, 25(2), 380-393.
- Muraleedharan, V. R., Jan, S., & Prasad, S. R. (2006). The trade in human organs in Tamil Nadu: The anatomy of regulatory failure. *Health, Economics, Policy and Law*, 1(1), 41-57.
- Naqvi, S. A., Ali, B., Mazhar, F., Zafar, M. N., & Rizvi, S. A. (2007). A socioeconomic survey of kidney vendors in Pakistan. *Transplant International*, 20(11), 934-939.
- NaRanong, A., & NaRanong, V. (2011). The effects of medical tourism: Thailand's experience. *Bulletin of the World Health Organization*, 89(5), 336-344.

- Newman, M. I., Camberos, A. E., & Ascherman, J. (2005). Mycobacteria abscessus outbreak in US patients linked to offshore surgicenter. *Annals of Plastic Surgery*, 55(1), 107-110.
- Ninian, A. (2008). Medical tourism. European Commission's law on cross-border health care. *Contemporary Review*, 290, 486-492
- Noorani, M.A. (2008). Commercial transplantation in Pakistan and its effects on Western countries. *British Medical Journal*, 336(7657), 1378.
- Otley, T. (2007, November 11). Patients without borders. *Business Traveller*, p., 36-37.
- Panama Medical Tourism. (n.d.). [Website]. Retrieved December 1, 2012 from <http://panamamedicaltourism.com/>
- Patients Beyond Borders. (n.d.). [Website]. Retrieved December 1, 2012 from <http://www.patientsbeyondborders.com/hospital>
- Phadke, K. D., & Anandh, U. (2002). Ethics of paid organ donation. *Pediatric Nephrology*, 17(5), 309-311.
- Pocock, N. S., & Phua, K. H. (2011). Medical tourism and policy implications for health systems: A conceptual framework from a comparative study of Thailand, Singapore and Malaysia. *Globalization and Health*, 2011, 7:12.
- PR Newswire. (2011, July 6). World-class hospital to open in Barbados to serve global medical tourism market. *PR Newswire*. Retrieved December 1, 2012 from <http://www.prnewswire.com/news-releases/world-class-hospital-to-open-in-barbados-to-serve-global-medical-tourism-market-125078069.html>.
- Ramesh, R., & Williams, R. (2010, August 2). NHS trusts bid to attract more private patients. *The Guardian*, p. 1 Retrieved December 1, 2012 from <http://www.guardian.co.uk/politics/2010/aug/01/nhs-trusts-private-patients>.

- Runnels, V., & Turner, L. (2011). Bioethics and transnational medical travel: India, “medical tourism,” and the globalisation of healthcare. *Indian Journal of medical ethics*, 8(1), 42-44.
- Saligram, P. S. (2009, August). *Trade aspects of medical tourism in India*. Unpublished master’s dissertation, University of Edinburgh, Edinburgh, Scotland.
- Saniotis, A. (2007). Changing ethics in medical practice: A Thai perspective. *Indian Journal of Medical Ethics*, 4(1), 24-25.
- Scheper-Hughes, N. (2002). The ends of the body: Commodity fetishism and the global traffic in organs. *SAIS Review*, 22(1), 61-80.
- Sengupta, A. (2008). Medical tourism in India: Winners and losers. *Indian Journal of Medical Ethics*, 5(1), 4-5.
- Sengupta, A., & Nundy, S. (2005). The private health sector in India. *British Medical Journal*, 331(7526), 1157-1158.
- Shetty, P. (2010). Medical tourism booms in India, but at what cost? *The Lancet*, 376(9742), 671-672.
- Shimazono, Y. (2007). The state of the international organ trade: A provisional picture based on integration of available information. *Bulletin of the World Health Organization*, 85 (12), 955-962.
- Smith, R. D. (2004). Foreign direct investment and trade in health services: A review of the literature. *Social Science & Medicine*, 59(11), 2313-2323.
- Stephano, R-M., & Edelheit, J. (2010). *Medical tourism: An international healthcare guide for insurers, employers and governments*. West Palm Beach: Global Health Insurance Publications.

TEAM Tourism Consulting. (2010, March). *London and medical tourism*. Edinburgh: TEAM Tourism Consulting.

The European Parliament and the Council of the European Union. (2011, February 21).

Directive 2011/.../EU of the European Parliament and of the Council of on the application of patients' rights in cross-border healthcare [Brussels, 21 February 2011 (OR.en) 2008/0142(COD) PE-CONS 6/11 SAN 11, SOC 57, MI 36, CODEC 113]

Retrieved December 1, 2012 from

<http://register.consilium.europa.eu/pdf/en/11/pe00/pe000006.en11.pdf>.

Thomas White Global Investing. (2009, July 17). A postcard from the Middle East: Jordan:

Medical tourism uplifts the economy. *Thomas White Global Investing*. Retrieved

December 1, 2012 from [http://www.thomaswhite.com/explore-the-](http://www.thomaswhite.com/explore-the-world/postcard/2009/jordan-medical-tourism.aspx)

[world/postcard/2009/jordan-medical-tourism.aspx](http://www.thomaswhite.com/explore-the-world/postcard/2009/jordan-medical-tourism.aspx).

Tremlett, G. (2009, October 5). Scrounging foreigners? British expats accused of health tourism in Spain. *Guardian.co.uk*. Retrieved December 1, 2012 from

<http://www.guardian.co.uk/society/2009/oct/05/british-expats-health-tourism-spain>.

Turner, L. (2007). 'First world health care at third world prices': Globalization, bioethics and medical tourism. *Biosocieties*, 2, 303-325.

Turner, L. (2008). 'Medical tourism' initiatives should exclude commercial organ transplantation. *Journal of the Royal Society of Medicine*, 101(8), 391-394.

Turner, L. (2009). Presentation at Medical Tourism Colloquium, University of Ottawa. Retrieved December 1, 2012 from

[http://www.globalhealthequity.ca/electronic%20library/Turner%20\(Kidney%20Selling%20and%20Vulnerable%20Populations\).pdf](http://www.globalhealthequity.ca/electronic%20library/Turner%20(Kidney%20Selling%20and%20Vulnerable%20Populations).pdf).

- Turner, L. (2011). Canadian medical tourism companies that have exited the marketplace: Content analysis of websites used to market transnational medical travel. *Globalization and Health*, 7(1), 40-55.
- Walraven, G., Manaseki-Holland, S., Hussain, A., & Tomaro, J. B. (2009). Improving maternal and child health in difficult environments: The case for "cross-border" health care. *PLoS.Medicine*, 6, e5.
- Whittaker, A. (2008). Pleasure and pain: Medical travel in Asia. *Global Public Health*, 3(3), 271-290.
- Wibulpolprasert, S., Pachanee, C-A., Pitayarangsarit, S., & Hempisut, P. (2004). International service trade and its implications for human resources for health: A case study of Thailand. *Human Resources for Health*, 2, 10.
- Woodman, J. (2008). *Patients beyond borders: Everybody's guide to affordable world class medical travel*. [2nd Edition]. Chapel Hill: Healthy Travel Media.
- World Health Organization-Eastern Mediterranean Regional Office. (2005). *Trade in health-related services and GATS*. Cairo: WHO-EMRO.
- World Health Organization – Eastern Mediterranean Regional Office. (2006). *Country cooperation strategy for WHO and the United Arab Emirates 2005–2009*. EM/ARD/015/E/R. Retrieved December 1, 2012 from http://www.who.int/countryfocus/cooperation_strategy/ccs_are_en.pdf.
- World Health Organization – Eastern Mediterranean Regional Office. (2007). *Health systems profile – Jordan: Regional Health Systems Observatory*. Retrieved December 1, 2012 from

<http://gis.emro.who.int/HealthSystemObservatory/PDF/Jordan/Health%20system%20organization.pdf>.

World Health Organization. (2008). *Primary health care: Now more than ever* [The World Health Report 2008]. Geneva: WHO.

York, D. (2008). Medical tourism: The trend towards outsourcing medical procedures to foreign countries. *The Journal of Continuing Education in the Health Professions*, 28(2), 99-102.

Youngman, I. (2009). Medical tourism statistics: Why McKinsey has got it wrong. *International Medical Travel Journal*. Retrieved December 1, 2012 from

<http://www.imtj.com/articles/2009/mckinsey-wrong-medical-travel/>