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The Proliferation of Cross-border Trade in Health Services

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Executive Summary

Consumers from the developed world are now turning to emerging markets to seek and secure health services. Driven by ever-increasing costs and rationing of health care, these patients find physicians trained Western institutions and internationally accredited hospitals offering state-of-the-art amenities awaiting at the destination of their medical meccas. Health care costs in the United States are inflated by disparate labor compensation, intrusive third party involvement, abundant cross-subsidies, and excessive regulation. Patients in nations with single-payer health systems like the United Kingdom and Denmark see daunting queues standing between them and needed health care. Private hospitals in countries like Thailand, India, Singapore, Costa Rica, and Columbia, specializing in highly tradable procedures, have flattened the medical world, competing on a cost basis vying for the business of Western patients. Part I of this paper presents an over view of the phenomenon of medical tourism, discussing its main drivers and industry characteristics, part II takes a deeper look into the economic effects of trade in health services, both on exporting and importing countries, and part III discusses the regulatory frameworks in the United States that inhibit liberalized cross-border trade in health services.

Part I: The Phenomenon of Medical Tourism

Uninsured American citizens in need of vital medical procedures are often faced with exorbitantly high costs of medical care. These costs are inflated by comparatively high labor costs, intrusive third party (government and insurance companies) involvement, lack of price transparency, cross subsidization, and industry regulation (Catteneo, 2009; Herrick, 2007; Turner, 2007). An invasive heart procedure, such as a mitral valve replacement, with a subsequent hospital stay and all associated fees can cost an uninsured American close to $200,000 (Lancaster, 2004). The same treatment performed in a foreign hospital by a foreign physician, along with post-operative care and travel expenses, could cost as little as five percent of the American total (Herrick, 2007). As the cost disparity illustrated above widens and globalization continues, increasing numbers of patients from Western Europe, the United States, and Canada are choosing to forgo treatment in their homelands in exchange for cheaper or more timely health care offered in premier medical centers located around the world.

Deloitte Consulting estimated that 750,000 Americans went abroad to receive healthcare in 2007 and projected that this number would grow by 100% annually to reach over six million outpatients by 2010. Deloitte readjusted their estimates to account for the recessional effects in 2010, but the trend remains similar, predicting sustained growth at 35% annually (Deloitte, 2010). McKinsey & Company (2006), also predicted a large increase in worldwide medical tourism would take place in the latter half of the decade, estimating that the industry's gross profit would expand from $60 billion USD in 2006 to $100 billion USD by 2012 (Herrick, 2007). Reliable estimates, however, of the numbers of 'medical tourists' capitalizing on more cost-effective patient care abroad are

sometimes hard to obtain due to a lack of transparency in destination markets and a lack of international regulation of the industry.

Why seek treatment abroad?

Medical tourists seek treatment abroad for two main reasons: 1) vastly disparate costs or 2) access to timely treatment. Patients seeking to capitalize on cost advantages found in emerging markets are frequently American citizens bridled by the rising costs of health care in the United States. Patients seeking more timely medical treatment often reside in countries that provide universal healthcare but lack the infrastructure and resources to perform all needed procedures in a timely manner, like in the United Kingdom or Canada. Each reason can be reconciled by well trained physicians in developing nations, offering readily available medical care at discounted costs. (Turner, 2007)

Several countries around the world provide destinations for medical tourists, but most of the increasing traffic is concentrated in Southeast Asia and South America. Popular destination countries include India, Thailand, Singapore, Argentina, Brazil, Columbia, Costa Rica, and Panama among others (Arunanondchai, 2007; Gray, 2008; Herrick, 2007; York, 2008). Patients who seek treatment in these countries can expect highly trained physicians, often educated in the United States or Great Britain, and hospitals accredited by the Joint Commission International (JIC), an arm of the Joint Commission, an American non-profit organization that accredits a variety of health related organizations (Singh, 2008). These hospitals are staffed with highly trained medical staff and utilize the latest medical technologies and equipment (Turner, 2007).

In addition to the medical infrastructure provided in these emerging markets, many hospitals provide extensive hospitality services and additional amenities to medical tourists, such as extended stays in five-star hotels and expertly managed recovery and post-operative therapy periods.

Several hospitals in these regions have gained international recognition for their prowess in treating foreigners seeking alternative medical treatment. One such hospital is Bumrungrad International, a JIC accredited, multi-specialty hospital located in Bangkok, Thailand. The hospital was constructed in 1997 in accordance with United States hospital building and safety standards (Herrick, 2007). Staffed by nearly a thousand doctors, two hundred of which are U.S.-trained and board certified, and over seven hundred nurses, Bumrungrad International services over one-million patients annually, forty percent of which represent international patients, making it the largest single campus hospital in Southeast Asia in both categories (Boyd, 2011; Bumrungrad website; Simon, 2006, June, 14). Facilities at Bumrungrad include nineteen operating facilities (two specifically designed for cardiac procedures), four types of intensive care units (adult, pediatric, cardiac, and neo-natal), two heart catheterization labs, a surgical navigation system, and units with endoscopy, arthroscopy, and lithotripsy capabilities (Bumrungrad Website).

Apollo Hospitals Group, headquartered in Chennai, India, is another renowned player in the global health care services industry. Opened by Dr. Prathap C. Reddy as India's first for-profit hospital in 1983, the group now operates fifty-three individual hospitals treating patients from around the world (Logace, 2007). To date, seven of Apollo's facilities, located in Delhi, Chennai, Hyderabad, Ludhiana, Bangalore, Kolkata,

and Dhaka, have gained international accreditation from the Joint Commission International (Apollo Hospitals Group, 2010).

Medical Travel Intermediaries

American patients interested in seeking treatment abroad face two options when searching for facilities and physicians. Prospective patients may personally research the many hubs of cross border trade of medical services. Many of the larger facilities in Asia including Bumrungrad International and Apollo Hospitals Group, offer interactive customer service websites where customers can find specific doctors and their credentials and information about the facilities and services offered. Patients who are not familiar with the industry or specific facilities abroad, however, can coordinate international medical travel via the services of medical travel intermediaries (Cattaneo, 2009; Herrick, 2007; Turner, 2007). These intermediaries work much like specialized travel agencies. One such intermediary, MedRetreat, offers prospective patients choices among 183 medical procedures in seven different countries: India, Thailand, Malaysia, Brazil, Argentina, Turkey, and South Africa (Davidow, 2006). GlobalChoice Healthcare, an intermediary located in Albuquerque, New Mexico, lists a price comparison on their website (GlobalChoice Healthcare Website, 2011). These price comparisons indicate that services received abroad could cost as little as fifteen percent of the cost of procedures in the United States (Alsever, 2006). Medical travel intermediaries often employ trained doctors and nurses to analyze treatment options, assist in treatment decisions, and assess the quality of care in destination locations (Alsever, 2006).

Companion Global Healthcare is a medical tourism intermediary located in Columbia, South Carolina. The company website offers catchy slogans such as “because you should be focused on your health, not the details of your trip” and “just because you are traveling for healthcare doesn’t mean it can’t feel like a vacation,” blurring the lines between health care and leisure travel. The website also offers prospective patients with an over view of the medical tourism phenomenon, their provider network, former customer testimonials, and cost comparisons. The company also reaches out to employers, stating that their services can compensate for large deductibles that characterize many small business insurance plans. (Companion Global Healthcare, 2011).

Cost Disparity

The great disparity of costs between the United States and other parts of the world exists for several reasons. A wide variety of studies and cost analyses have been conducted comparing specific costs for commensurate procedures between the United States and other areas that often service international patients. Depending on the country, costs can be as much as 80-90% less than equal treatment in the United States. Listed below are some of the main drives behind inflated healthcare costs in the United States.

Labor Costs

The Center of Medicaid and Medicare Services (CMS) calculated that Americans spent $2.5 trillion on health care in 2009, far more than any other country in the world

(CMS, 2010). Labor costs in the United States, according to some studies, account for over half of the total cost of medical treatment. In 2004, Fitch Ratings, a respected management solutions company based in New York, published results finding that across 215 not-for-profit hospitals in the United States, labor costs constituted 52.2% of total hospital patient billing (Berger, 2005). Virtually all hospital personnel, doctors nurses, orderlies, management, unskilled labor, require significantly more labor costs in the United States than in other parts of the world. The premium price on labor seen in the healthcare industry is determined by the same macroeconomic factors that cause high labor costs in other industries. These causes, however, are exacerbated in the health care industry because of third party involvement and other regulations.

Third Party Involvement:

Of the $2.5 trillion spent on health care in the United States in 2009, third party payers (insurance, employers, and government) accounted for 71.9% of the total expenditures (U.S. Department of Health and Human Sciences, 2010). Markets such as health care, characterized by a intrusive third party involvement, often operate very bureaucratically and inefficiently. As a result of third party involvement, customers do not act like logical consumers when shopping for health services, and providers do not compete for business on a price basis (Herrick, 2007). Other countries, however, especially those who have become leaders in cross border trade of health services, often have a much lower proportion of third party payers. Domestic patients in India, Mexico, Thailand, and Singapore all pay in excess of 50% of total health expenditures (WHO, 2008). Health care markets in these countries operate much more competitively,

based largely on price considerations. This environment of competition allows for lower prices throughout the industry. Elective medical services, including plastic surgery and non medical vision corrections, for which patients usually pay for out of pocket, are much more competitive than procedures that endure high third party involvement in the United States (Herrick, 2007).

Lack of Price Transparency

When visiting a hospital or considering a medical procedure in the United States, prospective patients often cannot know the exact price of health services prior to treatment. Health care providers are resistant to price transparency for several reasons: 1) health care costs and payment systems are not standardized, 2) insurers do not want to disclose their negotiated prices, and 3) costs often vary widely between geographical regions (Kavilanz, 2009). Undisclosed health care prices bridle competition in the market, allowing for inflated prices.

Abundant Cross-subsidies

The American health care industry consists of a large number of nonprofit general hospitals. These hospitals often subsidize procedure costs with revenues from other procedures. For example, a highly invasive heart surgery may bill more than it actually costs the hospital. The hospital then uses the excess funds to compensate for operations that typically lose money such as emergency care and charity care for the uninsured (Herrick, 2007).

Malpractice Litigation

American doctors are often subject to high malpractice risks because of the patient oriented legal framework in the United States. While physicians in the United States might face upwards of $100,000 annually, amalgamating to approximately $55.6 billion industry wide, in malpractice insurance alone, doctors in Thailand pay an annual average of $5000 (Roth, 2006; Fox, 2010). Many developing countries, including Thailand, do not compensate patients for noneconomic damages (i.e. psychological pain and suffering).

Quality Concerns

Any time a patient makes a critical decision concerning personal health, quality and reliability of health care are chief concerns. Though quality metrics are not uniformly disclosed in the international medical marketplace, several studies have been conducted examining key quality indicators in the large foreign hospitals that regularly service western patients. According to a study by Project Hope, Bumrungrad (Thailand), Apollo (India), and Wockhardt (India), each of which are accredited by the JIC as meeting international standards for hospital facilities and surgical accommodations, experiences less than a one percent mortality rate in coronary artery bypass graft (CABG) procedures (Milstein, 2007). The same study finds that the average mortality rate for the same procedure in high volume hospitals in California is 2.91%. Mortality rates for CABG patients at the most renowned American hospitals, such as Cleveland Clinic and Johns Hopkins, are comparable to the best international hospitals (Herrick, 2007; Milstein, 2007).

Hospitals in the global market seek to distance themselves from the negative connotations associated with third world health care. Top international hospitals employ highly trained physicians, many of whom received training from renowned medical schools in the West at facilities like Johns Hopkins University, the University of Birmingham, and the University of London (Turner, 2007). Additionally, many medical facilities in developing countries have secured partnerships with reputed American medical centers. Wokhardt Hospital in India is associated with Harvard Medical School, and Apollo Hospitals Group partners with Johns Hopkins Medicine International (Turner, 2007). Duke University has partnered with the National University of Singapore and the Singapore government to operate a top quality medical school in the country's capital that opened in 2007 and will graduate its first class in 2011 (Gallaher, 2009).

Part II: Economic Effect of Cross-border Trade in Health Services

Trade in health care is nothing new. Patients from around the world have long taken journeys to secure health care that fits their needs. What is new, however, is the direction of trade. Traditionally, developed countries like the United States, Great Britain and other countries in Western Europe with strong medical capabilities have exported health services to underdeveloped countries. Elite medical facilities in the United States and other developed countries such as the Cleveland Clinic, the Mayo Clinic, Massachusetts General Hospital and others focused efforts towards expanding their international clientele in the 1980s and 1990s (Turner, 2007; Weber, 1998). Lured by the promise of top quality health care, wealthy patients from the Middle East, South America, and other areas of the underdeveloped world capitalized on treatments offered

in the United States and Western Europe. In the last ten years, however, trade has reversed. Patients from the developed world are now turning to underdeveloped areas, seeking quality health care at discounted costs, able to be provided on a nearly immediate basis. Economists are only beginning to study the phenomenon of the new model of cross-border trade in health services.

Types of Trade in Health Services

The phenomenon of cross border health sector trade can refer to a variety of different market interactions. Economists have broken trade in health services into four separate modes to describe each interaction more narrowly (Cattaneo, 2009). Although each mode is related, each is different and offers a unique dynamic between health care markets. This paper will focus on mode two, yet it is important for readers to recognize the nature and potential benefits of modes one, three, and four as well.

Mode 1: Tele-medicine

Although it remains underdeveloped in several ways, tele-medicine is a prominent mode of health service trade. As Singh and Wachter (2008) describe, technology now allows the remote electronic outsourcing of medical services from diagnostics to direct care.

Mode 2: “Medical Tourism”

Medical tourism refers to the treatment of patients in foreign markets. The newly popular model of medical tourism sees patients from rich countries such as the United States, Great Britain, etc often travel to developing countries like India, Singapore, or Thailand to receive medical attention. As discussed in part I, medical facilities and practitioners in these countries hold significant international certification,

Mode 3: Foreign commercial participation in domestic health care

While economies of both developing and developed countries stand to benefit from foreign participation in their domestic health care structures, regulatory environments often disallow foreign participation on a large scale. Foreign participation potentially offers new resources, fosters competition, and encourages technological advances in domestic markets.

Mode 4: Physical presence of foreign medical personnel in domestic markets

In cases where a market suffers from supply shortages, medical personnel can be imported into the country to alleviate demand stresses, leading to reduced training costs, increased flexibility, and greater access to health care for consumers. (Cattaneo, 2009; Herman, 2009)

Tele-medicine

Much like other outsourcing trends seen in the business world, disparate labor costs, technological advances, and increased communication have created a sustainable venue for cross-border trade in electronic-based health services. Digitized medical records, technologically advanced healthcare facilities, and additional infrastructure allow for electronic delivery of services traditionally offered only in a face to face setting including clinical (e.g., specialist consultation), diagnostic (e.g. teleradiology), or information distribution (Singh, 2008).

The most prevalent form of telemedicine is teleradiology, the practice of outsourcing diagnostic services to foreign countries to be read by licensed radiologists (Singh, 2008). According to some studies, over 300 hospitals in the United States and

over two thirds of radiology practices are regularly engaged teleradiology (Wachter, 2006). Much of the compulsion to outsource radiological services stems from cost considerations. Similar to medical tourism, costs of domestic radiology services are inflated by labor costs, third party involvement and a lack of competition (Singh, 2006). Another significant reason for teleradiology is it's accessibility. For example, when a patient is admitted into the emergency room after an early morning car wreck, the hospital may take X-rays or other diagnostic images on site, but send them to a hospital in India for immediate review. In this scenario, an Indian radiologist will read the images during normal working hours and send his or her findings back to the hospital so the patient can be prepped for an emergency surgery as soon as a doctor arrives to the facility. This strategy relieves the need or around the clock on-call services, thus, saving costs and streamlining diagnostic procedures.

Several intermediaries link imaging technicians and equipment with radiologists around the world. VRad (Virtual Radiology), is a teleradiology intermediary partnered with over one-hundred radiologists around the globe (vRad, 2011). VRad, now one of the largest teleradiology companies in the United States, recently bought NightHawk Radiologists, another intermediary in the industry. Before the merger, the average NightHawk Radiologist held thirty-eight state licenses and had staff privileges in about four hundred hospitals. The firm employs thirty five people whose sole purpose is overseeing the licensure and credentials of radiologists in their network (Wachter, 2006)

Although teleradiology is the most prevalent form of telemedicine, a few innovative firms and hospitals are taking the practice to new boundaries. Advanced ICU, a firm based in St. Louis, Missouri, contracts with several hospitals in midwest to

coordinate and operate remote intensive care units, bringing “scarce critical expertise to ICU patients via telemedicine” (Advanced ICU website, 2011). Remote intensive care allows for intensivists, with the aid of cameras, electronically relayed sensory details, and other communication tools such as online decision support and adverse event notification, to monitor several patients in multiple hospitals from a central location (Henkel, 2006). Studies have shown promising results from the practice of remote intensive care practices. One early study conducted in 2004 showed that eICUs resulted in a 27% reduction of severity-adjusted hospital mortality, a 17% drop in length of ICU duration, and an average savings of $2,150 per patient (Breslow, 2004).

Medical Tourism

Medical tourism, as is overviewed in part I, consists of the physical treatment of domestic patients in a foreign country. The most common model sees rich countries such as the United States or Great Britain importing services from poor countries, though other models exist as well. Unlike telemedicine, all services, except for post-operative follow up care, are rendered in the destination country, thus, medical tourism represents more of a traditional trade model than telemedicine’s outsourcing model. The economic effects are similar, but not the same.

Benefits to Medical Tourism

The phenomenon of mode two cross-border trade in health services is largely market driven, shaped by multiple tensions found in medical, economic, political, and social forces. Many rich countries, namely the United States, find themselves in a

position of ever-increasing health care costs caused be several factors discussed in part I. Other rich countries such as the United Kingdom, Denmark, Canada, and other single-payer model countries are experiencing health service imports because of political structures that cause capacity-based health care rationing. Section II will examine these forces, especially the economic drivers, more closely as well as the long term effects that they could imply.

Cost Reduction

Drivers behind cost disparities were overviewed in Part I. The labor costs, third party involvement, price secrecy, cross-subsidies, malpractice risk, and lack of specialization found abundantly in the American health system lead to health care prices far greater than seen in many developing countries. Table 1 below details the difference in costs of several common medical procedures between the United States, Singapore, Thailand, and India. Table 2 shows the percentage differences compared to the United States prices.

Table 1: Comparative costs of surgical procedures

Procedure	Cost in USD			
	USA	Singapore	Thailand	India
Heart Bypass	130000	18500	11000	10000
Heart Valve Replacement	160000	12500	10000	9000
Angioplasty	57000	13000	13000	11000
Hip Replacement	43000	12000	12000	9000

Procedure	Cost in USD			
Hysterectomy	20000	6000	4500	3000
Knee Replacement	40000	13000	10000	8500
Spinal Fusion	62000	9000	7000	5500

Source: Cattaneo (2009), based on Einhorn (2008) and author's calculation.

Table 2: Percent disparity compared to United States

Procedure	Cost compared to the USA		
Heart Bypass	14.20%	8.50%	7.70%
Heart Valve Replacement	7.80%	6.30%	5.60%
Angioplasty	22.80%	22.80%	19.30%
Hip Replacement	27.90%	27.90%	20.90%
Hysterectomy	30%	22.50%	15%
Knee Replacement	32.50%	25%	21.30%
Spinal Fusion	14.50%	11.30%	8.90%

Source: Cattaneo (2009), based on Einhorn (2008) and author's calculation.

The cost saving potential for the United States for mode 2 trade in health services is significant. According to a study conducted in 2004 examining key price and demand indicators, the American healthcare industry would save approximately $1.4 billion (USD) annually if only ten percent of patients were to go abroad for a limited set of fifteen highly tradable, low risk treatments (Mattoo and Rathindran, 2006). In order to diagnose these fifteen procedures, Mattoo et al partnered with the World Bank's Health

Services Department to derive six qualifications that a procedure must meet to be considered highly tradable. The criteria are as follows:

1) The surgery constitutes treatment for a non-acute condition, meaning the nature of the condition does not require immediate medical attention

2) The patient is able to travel long distances without significant pain or debilitating inconvenience

3) The surgery is fairly simple and commonly performed with minimal post-operative complications

4) The surgery requires minimal on sight follow up visits

5) The surgery generates minimal pathology and laboratory reports

6) The surgery results in minimal post-procedural immobility, allowing patients to return to their home countries in a timely fashion.

Trade in Associated Services

Medical tourism also requires the trade of significant ancillary services because all activities associated with a destination medical trip are included. This includes paramedical services, but also transportation, housing accommodations, and other services often associated with traditional tourism (Cattaneo, 2009). Because physicians found in many hospitals specializing in treatment of medical tourists have been educated in top American medical programs, trade in medical education also accompanies medical tourism (Herrick, 2007). Mode two trade in health services also requires the cross-border trade of goods associated with health care including, but not

limited to health care equipment, pharmaceuticals, and medical waste products. (Cattaneo, 2009)

Increased Competition in the Health Industry

As discussed briefly in part one, medical travel liberalizes the healthcare market, leading to greatly increased competition among countries, facilities, and providers. The destruction of national barriers opens up the world market to global competition in health services. In an environment where consumers can freely act as rational customers, competitive advantage and specialization becomes the driving force behind consumer movement (Turner, 2007).

Most of the well known destination hospitals including Bumrungrad International and Apollo Hospitals Group make efforts to specialize in surgeries and procedures often sought out by medical tourists. Well known medical tourism destination hospitals invest significant resources into these programs. For example, Bumrungrad International invested significant resources into two state-of-the-art cardiac surgery theaters (Bumrungrad website). Hospitals in Australia often specialize not only in cancer treatment, but treatment of specific types of cancer (Chu, 2005).

What makes a nation a good market for medical tourism?

A profitable atmosphere for health service export is bred in ways similar to other services. The right mix of national factor endowments, development strategies, demand conditions, and related industries leads to export potential. Countries discussed in this paper usually have similar make-ups in these categories. According to a paper

published in 2006, countries excelling in health services export generally possess the following qualities:

Factor Endowments

Countries specializing in medical outsourcing possess similar input factors (Harryono, 2006). Firstly, physical infrastructure including hospitals, medical research centers, and accommodating facilities are necessary to breed an export market for health services. Human capital is also an important factor. Countries like Thailand and India have strong medical education programs as well as programs for aspiring physicians to receive medical training in developed countries like the United States (Herrick, 2007). Many countries that take advantage of medical tourism also possess well-developed hospitality industries. Countries like Thailand and Singapore have strong tourism industries independent of medical services. Bangkok, capital of Thailand and home of Bumrungrad International Hospital, has many five-star hotels, a bustling restaurant industry, and other well established tourist accommodations.

National Economic Development Opportunities

National political and economic strategies and atmospheres also serve to breed increased trade activities in health sectors. As a result of economic crises facing much of the undeveloped world in the 1990s, national health care markets collapsed in many Asian and South American countries. Amidst the downturn, private hospitals in Thailand began seeking patients from international markets. The dire Thai economy led to rapid currency devaluation, rampant unemployment, and hellacious market behaviors. People

across Thailand lost their savings as importing medical equipment became unsustainably expensive and local citizens could no longer afford to purchase private health care (Chantarapitak, 2006). The economic conditions in Thailand, especially the drastically devalued *baht,* provided the perfect atmosphere for Bumrungrad International Hospital to make a significant step into the global market place (Turner, 2007). Bumrungrad quickly attracted a substantial international clientele, as it became the first Joint Commission International accredited hospital in 2002, promising first-world quality health care at relatively inexpensive prices as Thailand became one of the hottest destinations for medical tourists.

Health care stakeholders around the world noticed as Thailand's medical imports took flight. Underdeveloped areas in similar economic situations--low wages, low corporate taxes, inexpensive property, negligible malpractice risk, favorable currency exchange rates, and able medical capital--recognized the opportunities before them as the proliferation of cost-based medical tourism became a living phenomenon (Turner, 2007).

Many governments in medical tourism hotbeds view cost-based medical tourism as a vehicle for economic and social development. The integration of health care and tourism industries offers many developing countries a unique opportunity for economic diversification, attracting foreign investment, promoting job growth, and capitalizing on comparative advantages based on factor endowments and demand conditions (Cattaneo, 2009).

In recent years, Singapore has developed the most cohesive in institutionalized approach to bolstering health care export activities. Rather than relying on American

third party intermediaries as discussed in part 1, the Singaporean government promotes medical travel to the country via a public-private partnership with Singapore Medicine (Turner, 2007). Prospective patients are able to find hospitals, patient centers, and specific specialists on the Singapore Medicine website, providing easy access to all major health providers in Singapore. The governments strategy has paid off as international patients finding treatment in Singapore increased from 150,000 in 2001 to 374,000 in 2005 and is projected to exceed 1 million visits by 2012 (Yap, 2006a).

Other countries have mirrored the successes of Bumrungrad International's global marketing strategies and Singapore's focused development strategies. India's government has adopted the view that care of international patients represents an important export. To support this cause, the government has enacted special zoning laws, reduction of tariffs on imported medical equipment, lower corporate taxes, and increased government investment in transportation and related infrastructure (Turner, 2007). Countries who are not yet major players in the health services export market, namely Vietnam, South Korea, and Taiwan, are also examining ways to attract increased numbers of international patients (Catteneo, 2009).

The proliferation of export trade in health services in developing countries certainly leads to many economic advantages, but the disadvantages associated with stratifying the availability of health care, weighted heavily towards international patients and socioeconomic elites should be a major concern for medical tourism hot spots. "Crowding out" of the market should be a concern for nations looking to bolster medical tourism within their borders. Drawn by low costs and accessibility of health care facilitated by the national strategies discussed above, increased international health

travelers will lead a rise in prices over the long run, a progression that will make health care more inaccessible for local patients (Turner, 2007). Thailand has especially worrisome concerns about redistribution of health care associated with increased health care exports. By not participating in national health insurance schemes, private hospitals in Thailand generate more revenue per patient, allowing them to attract more medical personnel by offering higher compensation (Arunanondchai, 2007). Thus, the country's best physicians are diverted away from public health facilities (Wibulpolprasert, 2008). This internal "brain drain" diverts between 240 and 700 Thai physicians away from the public sector for every additional 100,000 medical tourists that visit the country (Pannarunothai, 2004; Wibulpolprasert, 2008).

Demand Conditions

International demand for health care in the developing world is enhanced by a number of factors. Beyond the infrastructure and educational facilities that make an international level of health care possible, demand can also be boosted by expatriates in the region and established tourism trends.

Outsourcing and expatriate trends have shifted heavily towards the developing world including many of the same countries who have seen increased medical tourism (Terry, 2007). Countries like Thailand, China, Taiwan, India, and Singapore enjoy substantial numbers of expatriates from the developed world demanding first-world level health care (Turner, 2007). An established flow of international tourists also leads to increased trade in health services for developing countries. Southeast Asia enjoys the travel of many western tourists looking for an exotic vacation. Top countries include

Thailand, Singapore, and Malaysia (Harryono, 2006). Thailand's national inbound tourism continues to rise at an astonishing rate, realizing annual growth of over 12% in 2010 as total national arrivals reached 13.3 million tourists (UNWTO, 2011). Many countries in South America and the Caribbean region see increased medical tourism as a mirror of traditional tourism patterns. For instance, tourist rich countries like Costa Rica, known for its quality dental work, and Brazil, known for cut-rate plastic surgery have seen increased medically-based travel as general tourism increases (Herrick, 2007).

Related and Supporting Industries

Well developed supporting industries allow for better experiences for international patients. In Thailand, Singapore, and India, patients often arrange to stay in five-star hotels or other living facilities during recovery. Thriving restaurants and shopping also attract patients looking to blend the lines between traditional tourism and medically-based travel. Models such as Singapore's institutionalized medical brokerage, serving as a travel agency offering both medical and leisure accommodations, streamline the process of international medical travel (Turner, 2007).

Insurance Companies and Medical Tourism

Recognizing the cost-saving potentials found in the import of medical services, insurance providers in the United States have also taken note of the globalization of the health care industry. Traditionally, the vast majority of insurers in the United States do not cover services rendered by foreign providers, but large insurers are considering

ways to take advantage of low cost health care found in developing countries. Mercer Consulting Group has been assisting many Fortune 500 companies as they explore insurance options allowing foreign travel since 2005 (Herrick, 2007). Arnold Milstein, chief physician Mercer's Health and Benefits division, stated in 2005 that "many companies see [medical tourism] is a natural extension of the competition they have faced in other aspects of their business" (Fraser, 2006).

Insurance plans that cover foreign health care services are already sparsely offered in the United States. BlueShield of California institutionalized "Access Baja" in 2000, a program providing coverage for certain procedures performed in Mexico. Originally designed to provide Mexican Nationals who commute to Southern California for work with affordable health care in their domestic country, the program garnered 40,000 participants by 2005, many of whom were American citizens (Herrick, 2007). Insurance premiums under the Access Baja plan as well as similar plans now offered by HealthNet and SIMNSA are about 40% less than the cost of alternative plans offered by BlueShield of California (Cortez, 2010). In February 2007, BlueCross BlueShield of South Carolina added Bumrungrad International Hospital to its network, though no financial incentives to take advantage of the Thai facility were offered. BlueCross BlueShield of South Carolina also created a medical tourism intermediary, Companion Global Healthcare, as a subsidiary to arrange international medical travel that may or may not be covered by BlueCross BlueShield (Fraser, 2006; BlueCross BlueShield of South Carolina Website).

Some governmental entities in the United States have considered offering international health care plans to state employees. State legislatures in West Virginia

and Colorado considered legislation that would have offered travel reimbursement and a cash rebate for state employees who seek treatment in Joint Commission International accredited hospitals (Terry, 2007). Each bill, however, was rejected upon regulatory grounds (Cohen, 2010).

Barriers to Coverage of international health care

In their 2006 article, Additya Mattoo and Randeep Rathindran argue that health insurance programs that do not accommodate international health excursions are discriminatory in nature, disallowing consumers to take advantage of health providers in the international market to reduce premiums and deductibles. They argue that the basic economic, institutional, and intellectual infrastructures are already well in place to support large scale medical tourism, leading to cost savings and greater access to health care. Mattoo and Rathindran identify four reasons that American insurance providers are hesitant to adopt coverage of international treatments:

1) quality concerns and asymmetric malpractice laws
2) cost of monitoring health care consumption abroad
3) increased costs for the public health care system
4) distorted incentives in oligopolist markets.

Quality assurance should be a major concern for any health insurer. International accreditation measures seen in a number of foreign medical facilities, the strength of foreign physicians, and dedication among health care exporters, however, should calm the fears of American insurers. Malpractice policies and other legal framework

asymmetries, which will be discussed at length in part III, present a more ominous concern.

Faced with increased overhead expenditures, possible overconsumption, and the financial uncertainty of the international market, insurers worry that the coverage of foreign treatments will greatly increase their costs. Collaborating with foreign insurers and institutionalizing agile oversight processes, however, could mitigate these concerns (Warner, 1998).

In the United States, heavily cross-subsidized medical procedures increase the income of the public health system. “Profitable” patients (e.g. patients receiving capital intensive, pre-meditated procedures usually covered by a patient’s existing insurance) compensate for losses incurred by emergency care and other nonprofitable forms of care. If a large portion of these profitable procedures move offshore, hospitals and public health systems will have no way to cover the unprofitable procedures that cannot be moved abroad. Similarly, economies of scale exploited in large volumes of profitable procedures may be lost as services move to low-cost regions, lowering the prices for patients able to travel, but effectively raising prices for those unable to travel. Mattoo and Rathindran vaguely propose the institutionalization of tax systems to compensate for lost revenues, but also assuring that medical tourists remain better off.

Mattoo and Rathindran argue that American insurers resist the adoption of international policies because of distorted incentives caused by the oligopolist nature of the health care system in the United States. In a noncompetitive market, insurers are not incentivized to reduce costs for consumers. The increased competition that would accompany the promotion of international health travel would remove insurers from the

protected oligopoly of the American health care system and lower prices for American consumers.

Part III: Regulatory Framework

The health care industry in the United States experiences extensive regulation by both government institutions and inter-industry regulatory bodies. The current regulatory framework was erected largely in the name of consumer protection and ranges from physician licensure procedures to approval of pharmaceuticals and medical procedures.

Regulatory Framework in the United States

The two main federal health care oversight agencies are 1) the United States Public Health Service, which is comprised of the Food and Drug Administration, Center for Disease Control and Prevention, Agency of Health Care Research and Quality, and other boards, and 2) the National Institutes of Health which conducts substantial health related research. The passage of the Patient Protection and Affordable Care Act in 2010 extended the federal government's involvement in health care to unprecedented levels, mandating that all citizens must purchase health insurance through federal, employer, or private means and that insurance companies cannot deny prospective customers based on preexisting conditions (PPACA, 2010).

State governments have a more fluid role in health care regulation. In addition to maintaining their own health departments, states regulate insurance markets, physician licensure, referral practices, collaborative frameworks and other facets of the medical

industry. Regulation varies between states and often reflects the overall political environment of the state and its historical legislative tendencies.

The health care industry is characterized by substantial internal regulation. Boards like the American Medical Association and state medical boards offer certification for qualified physicians. Boards such as the Joint Commission on the Accreditation of Hospital Organizations offer inspection and certification of care giving facilities.

The regulation of the health care industry has often been a controversial topic of debate among industry stakeholders, politicians, and external analysts. The Patient Protection and Affordable Care Act sparked fierce debate about the role of the federal government in the health care industry. Its impact on the industry remains to be seen, but it is reasonable to expect overall federal health care spending to increase and capacity based rationing of health services to become a factor in caregiving. In 2004, the Cato Institute, a conservative think tank and research firm, published a report claiming that the American health care realizes benefits of $170 billion, but costs the economy $340 billion (Conover, 2004).

The extensive regulation of the health care industry in the United States leads to most of the cost drivers discussed in part I, resulting in domestic health care that is drastically more expensive than foreign options. The industry experiences inflated labor costs due to an inefficient compensation structure enforced by payment regulations that lead to economic distortions for both physicians and insurance companies. Third party involvement leads to several cost increases in a variety of ways including cross-subsidies, malpractice risk, and oligopolistic competition.

Inflated costs, as discussed throughout this paper, drive many patients from the developed world to seek care in other countries. The regulatory framework itself, indeed a large factor in exorbitant American healthcare costs, however, limits this phenomenon to uninsured patients forced to seek treatment in the competitive international market. Governmental regulations, private regulations, and insurance practices fail to facilitate the possibility of increased trade in health services. An effort to restructure pertinent policies and regulations while preserving patient protection to allow or encourage increased medically based travel could save the United States' health care system billions of dollars and increase the accessibility of quality health care (Mattoo, 2006).

Obstacles to Increased Medical Tourism

Most states have policies requiring that physicians be licensed in the state where they render treatments to patients, ostensibly preventing medical tasks performed by providers living in other states or countries from being covered by insurance (Herrick, 2007). Furthermore, foreign physicians who do not hold licensure in the United States cannot order tests, initiate therapies, or prescribe pharmaceuticals that may be beneficial in the diagnostic or follow-up stages of care to patients living in America. Additionally, states prohibit physician consultations performed via telephone, internet or other communication medium prior to an initial face to face meeting (Herrick, 2007).

Federal and state regulations also restrict collaborative efforts among health care providers. Restrictions on patient referrals, first enacted with the "Stark Law" in 1992, prohibit physicians from referring patients for treatment to clinics or other care giving facilities in which he holds a financial interest. Sponsored by United States

Representative Pete Stark of California, the Omnibus Budget Reconciliation Act of 1989 (OBRA) outlined these referral regulations to prevent over-utilization of services characteristic of a captive referral system (OBRA, 1989; Leibenluft, 2011). These laws, rightly intended to prohibit self-interested kickbacks, also inhibit constructive collaboration among doctors and hospitals. Collaborative efforts between American physicians or facilities and international physicians, such as Harvard Medical Schools partnership with Wockhardt Hospital in Mumbai and Duke University Medical School's venture with the University of Singapore, are often times dampened by these and other restrictions on collaboration (Gallaher, 2009; Turner, 2007; Herrick 2007).

Follow-up care is often not readily available for medical tourists once they return to the States. The burden of follow- up care falls to the domestic health system when medical tourists return to the States, but patients often have trouble locating a physician willing to provide follow-up care for a procedure performed abroad (Gray, 2008; Herrick, 2007). A physician's reluctance to provide follow-up care stems from several reasons. Most notably, physicians perceive providing post-operative assistance for a procedure performed by another provider as a liability, especially if the patient was treated abroad (Gray, 2008). Patients who seek treatment from foreign providers often lack insurance coverage, causing further reluctance for American physicians to offer follow-up care due to the uncertainty of financial incentive (Herrick, 2007).

There are also legal barriers to international health travel. Many employers have begun to recognize the cost saving potential of incentivizing medical tourism, but remain hesitant because of a few important legal conditions. Insurance sponsors must adhere to the regulations presented in the Employee Retirement Income Security Act (ERISA),

which, among other things, provides minimum standards for employee benefits including health insurance protection (ERISA, 1974; Purcell, 2009). Other forms of trade in health services, particularly Mode 1 (telemedicine), raise concerns pertaining to patient privacy under the Health Insurance Portability and Accountability Act (HIPAA). HIPAA provides privacy protection of electronic patient records and establishes national standards for electronic health care transaction (HIPAA, 1996). Under mode 1 trade, cross-border transfer of electronic files raises legal questions about HIPAA adherence as well as possible liability concerns

Changes to public policy

Many of the policies presented in the American heath care system, while offering unrivaled patient protection, hinder the proliferation of cross-border trade in health services and deny the potential financial gains intrinsically linked to international medical care. With recognition of the cost reductions and care improvements possible through the liberalization of increased medical tourism, policy makers, both public and private, have the opportunity to reshape health care policies to take advantage of these possibilities while preserving patient rights. Global competition has led to significant improvements across many industries, such as the automobile industry . As medical systems in the developing world continue to improve, global competition in health care can accomplish similar results. Several logical changes could be made to the health care system in the United States that would open up international medical-based travel while preserving the protection of patient right.

Readjust State Licensing Laws

Traditionally, the physicality of medicine has restricted its consumption to a small area, easily accessible by both the patient and the physician. Ever-increasing technology and the growth of quality health care in developing countries, however, has drastically "flattened" the medical world. Prospective patients are more mobile today, which makes the global world of health care more accessible. Consequently, patients can choose to be seen at home or abroad. In order to facilitate international care, state licensing laws should be readjusted to conform to the information age, where locale is less relevant. Doctors are now able to communicate with prospective patients and other physicians across the globe via video-conferencing and other internet avenues. Medicine is no longer a location-centric service. Patients in the United States should be able to receive treatment from physicians in other parts of the world. Physicians in Thailand, India, Singapore and other countries often hold board certifications in the United States. Patients are able to secure quality care from these physicians regardless of their home state and should be free to take advantage of cost-savings found in international care (Cwiek, 2007). State regulations could conceivably be relaxed to focus on equal standards of care instead of rigid licensing programs (Herrick, 2007).

Encourage Cross-border Collaboration

Increased collaboration among physicians, both foreign and domestic, has the potential to facilitate quality increases and offer cost-savings to the American health care system. Similar to what is beginning to be seen in Accountable Care Organizations (ACO), groups of physicians spanning multiple countries can be held collectively accountable

for the quality of care provided to American patients via contractual obligations (Elliot, 2011). The Stark Laws, however, would have to be revised to allow for increased collaboration with international providers (Herrick, 2007; Leibenluft, 2011). Practices could streamline care by employing a network of providers and information systems, providing timely care specific to the needs of each patient (Elliot, 2011).

Encourage domestic follow up care

Physicians prefer ongoing relationships, seeing patients from initial consultations through follow-up care and release. Patients who have travelled abroad to receive medical procedures have returned home to find domestic care givers who refuse to provide follow-up care due to liability issues (York, 2008). A framework releasing physicians from liability risks after overseeing medical tourists through the post-operative stage could encourage increased international medical traffic. As medical tourism increases, practices specializing in highly tradable procedures will begin to recognize the financial benefits linked with providing follow up care for those services rendered abroad (Herrick, 2007).

Malpractice in the Underdeveloped World

One of the most daunting barriers between the current American health care system and extensive international trade in health services is the lack of malpractice protection in the international market. Remarkably few cases of malpractice during medical tourism abroad have been reported, but those unlucky victims of malpractice have few, if any, safeguards or legal means to seek relief. Currently, there is no

international legal framework to protect patients in cases of medical malpractice (Mirrer-Singer, 2007).

The only potential defendants in a malpractice suit involving health services rendered abroad are 1) the foreign provider or 2) a medical tourism brokerage firm located in the United States (Mirrer-Singer, 2007). Such a case would have significant legal hurdles, likely insurmountable under current frameworks, and jurisdictional requirements in the United States. Potential legal remedies, however feeble, exist and merit discussion.

If considering a filing a lawsuit against a foreign provider, the plaintiff must establish that the court has personal jurisdiction over the nonresident defendant. In domestic cases filed against physicians practicing outside the forum state, courts have been reluctant to exercise personal jurisdiction over the defendant (Biggs v. Robert Thomas, O.D., 1995; Grove v. Mahaswaran, 1997). Plaintiffs can often circumvent this problem by filing suit in the home state of the physician. In a case of medical tourism, however, action of this sort would be unfruitful as the physician probably operates in a country that has no framework for malpractice litigation (Turner, 2007). Continuing tort theory also provides conceivable legal avenues in domestic cases, but minimal merit for victims of international malpractice (Mirrer-Singer, 2007). This theory holds that physicians may be liable, regardless of location of the forum state relevant to the physician's licensure, if a relationship has been perpetuated between the patient and physician. This dynamic is unlikely, however, under most medical tourism arrangements.

Filing a lawsuit against a medical tourism intermediary that provided arrangements for travel and care provisions to an American patient provides potential plaintiffs with more viable options. Unlike foreign physicians, medical travel intermediaries are not encumbered by personal jurisdiction problems. Firms incorporated in the United States establish its principal place of business in a particular state, thus subjecting themselves to that state's jurisdiction (Mirrer-Singer, 2007). Victims of malpractice abroad could potentially invoke theories of corporate negligence against intermediaries to pursue damages in the courts. Informed consent also provides potential grounds for litigation against medical travel intermediaries, since such entities go to great lengths to advertise the quality of international care and even advise prospective travelers. If this care proves to be substandard, however, especially in cases meriting malpractice, patients could seek to prove intermediaries misrepresented to quality of care that they facilitate.

Again, while these legal theories provide conceivable avenues for litigation, they have never been pursued with success in the international health market (Mirrer-Singer, 2007). Legal frameworks in developing countries are too primitive and foreign care providers are too autonomous for lawsuits filed in the United States.

Conclusion

Trends in cross-border trade in health services continue to rise. More and more patients from the United States and other first world countries are beginning to seek health care in the international market. Import markets are beginning to recognize the vast cost-saving potential of medical tourism, benefits of trade in related industries, and

the potential to streamline health care through increased global competition among physicians, medical facilities, and insurance providers. A global marketplace in health services liberalizes the accessibility of health care in both the developed and developing world. In recognition of both the economic and social gains associated with increased trade in health services, appropriate steps need to be taken to increase the viability and scale of prolonged international trade in the health sector.

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