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Hub Healthcare: Medical Travel and Health Equity in the UAE

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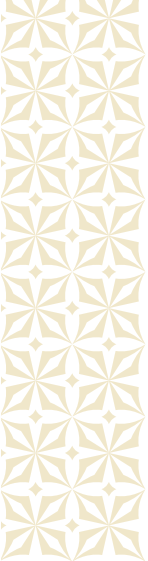
Executive Summary

In 2010, the government of the United Arab Emirates (UAE) spent a quarter of its total healthcare budget to send its citizens abroad for medical treatment. These patients, consumers who cross international borders for the purpose of obtaining healthcare, are participants in a phase of globalization referred to as “medical travel” or “medical tourism.” Their movement coincides with the cross-border flow of health services, professionals, and companies, shaping a global industry valued at as much as U.S. \$55 billion. In the years ahead, this industry is expected to grow—and, in doing so, to bring a greater number of national health systems in contact with international patients and providers.

Bearing witness to these changes, the UAE has increasingly looked to medical travel—and attracting international patients—to improve its health system and to diversify its economy. These outcomes, however, overshadow the equity effects that may result from the influx of such patients, potentially crowding out local residents, especially expatriates, who may see little from these gains. This working paper provides evidence, based on the examples of Dubai and Ras Al Khaimah, that medical travel presents the UAE with a mix of equity benefits and harms. To manage these harms, the paper recommends that local governments and healthcare providers incorporate monitoring and planning mechanisms into their medical travel initiatives.

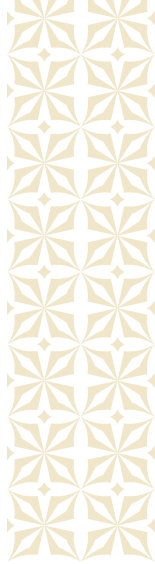
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Contents

Introduction	7
The Theory and Practice of Medical Travel	8
Figure 1: Number of U.A.E. Nationals, Residing in Dubai, who Traveled Overseas for Healthcare Between 2003 and 2013	8
The Landscape of Medical Travel	10
Figure 2: Medical Travel Initiatives in the UAE	12
The Mechanics of Medical Travel	15
Figure 3: Growth of JCI-Accredited Facilities in the UAE	17
Figure 4: Healthcare Supply Across Select Countries	18
The Equity Implications of Medical Travel	21
Figure 5: Composition of U.A.E. Healthcare Workforce	24
Figure 6: Distribution of JCI-Accredited Facilities in the UAE	25
Figure 7: Growth of U.A.E. Nationals Living Abroad	27
Policy Recommendations	30
Figure 8: Economic Impact of Medical Travel in Dubai	30
References	32





Introduction

For the better part of a century, residents of the United Arab Emirates (UAE) have traveled abroad for their most significant medical needs. Prior to the formation of the UAE in 1971, residents with means journeyed to destinations in the West, unsatisfied with the patchwork of local healthcare services provided by the British government and American missionaries (Metz, 1993). In the decades following independence, the country's healthcare infrastructure grew markedly, with the creation of some 40 public hospitals, all in operation by 1986, marking the advent of a modern healthcare system (Metz, 1993). Still, in spite of these developments, the providers of choice for many residents remained those outside the country's borders (Kronfol, 1999).

In recent years, however, the UAE has witnessed an increase in the number of international patients arriving at its own shores for care (Fatma Alsharaf, personal communication, 2015). These patients—consumers in a growing industry often referred to as “medical travel” or “medical tourism”—are participants in the latest phase of the globalization of healthcare (Crone, 2008).¹ Their movement across borders in search of affordable, high-quality care represents a fundamental transformation of the traditional doctor-patient relationship, whereby medical travelers are consciously choosing providers and health professionals countries and continents away rather than staying close to home. In doing so, they are remaking the way destination countries, like the UAE, are approaching the development of their health systems.

Yet, as medical travel becomes an increasingly important plank in the development strategies of emirate-level governments and healthcare providers, much about the local industry remains unclear. Little attention is paid, for example, to the diversity of medical travel initiatives that have sprouted across the emirates—initiatives that highlight the decentralized character of health policy in the UAE and that demonstrate the variety of models used by stakeholders to connect international patients to local providers. This inattention is partly the consequence of a research agenda dominated by private consultancies whose focus tends to be geographically limited and economically fixated (Oxford Business Group, 2015). As such, there has yet to be an *academic study that examines the public health impact of medical travel across the UAE*.

The purpose of this working paper is thus two-fold. First, it describes the landscape of medical travel in the UAE, where policy and strategy are shaped by a number of initiatives that encourage medical travel through a variety of approaches. Second, it examines the equity impacts of the sum of these initiatives, lending empirical support to the assertion that medical travel presents destination countries with a mixed bag of equity benefits and harms. To manage these harms, the paper concludes by recommending that stakeholders incorporate monitoring and planning mechanisms into their medical travel initiatives.

¹ The remainder of this paper uses the term “medical travel” to describe the broader category of consumers, particularly those with more severe medical conditions, traveling across international borders for the express purpose of obtaining medical care. These consumers are different from those participating in “medical tourism,” a subcategory of medical travel whereby consumers pair medical treatment with a vacation (Cohen, 2010).

The Theory and Practice of Medical Travel

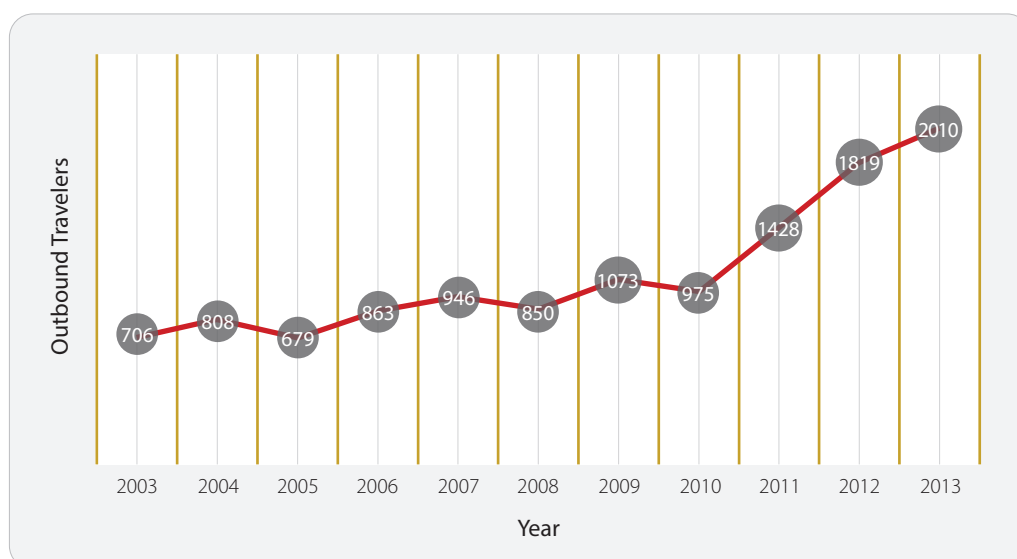
Medical travelers are consumers who cross international borders for the purpose of obtaining healthcare. These consumers are neither long-term expatriate residents who regularly use local healthcare facilities nor international tourists who, while traveling, coincidentally use local healthcare resources. In fact, their movement across borders takes place alongside the movement of health services, professionals, and companies that, since the World Trade Organization's (WTO) 1995 General Agreement on Trade in Services (GATS), characterizes an industry extending far beyond the tourism sector (Drager and Fidler, 2004; Jason Yap, personal communication, 2015). Medical travel, then, refers to "organized travel outside one's natural healthcare jurisdiction for the enhancement or restoration of the person's health through medical intervention" (Carrera and Bridges, 2006).

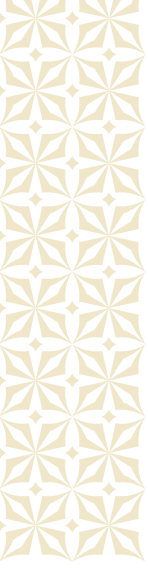
In figures, the size and scope of this industry are staggering. According to a recent report by KPMG, global medical travel was valued at U.S. \$10.5 billion in 2012, a figure projected to reach U.S. \$32.5 billion by 2019 (Memon et al., 2014). The number of patients traveling for healthcare, meanwhile, may be as many as 30-50 million, though estimates vary widely due to different survey methods employed across countries (Lunt et al., 2011; Yap, personal communication, 2015). A useful compromise, provided by the organization Patients Beyond Borders (2014), estimates a stock of 11 million medical travelers, each spending U.S. \$3,500-\$5,000 per visit, resulting in a market size of U.S. \$38.5-\$55 billion.

Patterns of Inbound and Outbound Travel

Similarly optimistic projections mark the UAE's own medical travel industry. Alpen Capital (2014) valued the UAE's medical travel market, in 2012, at U.S. \$1.6 billion. More particularly, Dubai, the first emirate to identify medical travel as a policy goal, attracted over 100,000 medical travelers in 2012, a figure that is expected to grow annually by 10-15% and, by 2020, generate over U.S.

Figure 1: Number of U.A.E. Nationals, Residing in Dubai, who Traveled Overseas for Healthcare Between 2003 and 2013





\$700 million in revenue (Colliers International, 2014; Alpen Capital, 2014). These estimates are in addition to the medical travel activity taking place in Dubai's healthcare free zone, which, in 2014, saw roughly 180,000 medical travelers seek care at its constituent facilities (DHCC, 2015).

The above projections are positive news for a country that, for decades, has watched its own residents leave the country for medical treatment. These "outbound" medical travelers, in contrast to those "inbound" patients deliberately seeking out U.A.E. providers, are typically nationals who lack confidence in their country's health system or expatriates who view local services as substandard or costly (Deloitte, 2011). A 2009 survey conducted by the international research firm YouGov found that over 70% of U.A.E. residents, if seriously ill, would seek treatment abroad (Underwood, 2009). The same survey, when administered five years later, reported only a small improvement in residents' attitudes—this despite a marked increase (almost 50%) in their trust of the country's healthcare system (Rizvi and Bell, 2015). Thus, the number of U.A.E. residents, particularly nationals, traveling abroad for care has risen over the past decade (see Figure 1).

Whether growth of the UAE's inbound medical travel market will outpace or even reverse that of its outbound market remains to be seen. To attract inbound travelers, the logic goes, the UAE health system must expand its physical and human capital while also raising the actual and perceived quality of its services. As capacity increases and standards rise, local providers will be better positioned to capture U.A.E. residents long accustomed to seeking treatment abroad. Preliminary data from Dubai show that, between 2011 and 2012, the number of U.A.E. nationals being treated in local facilities increased by 12%, a rise that the Oxford Business Group (2014) attributes, in part, to changing perceptions of local healthcare. Should such a trend continue, the UAE may eventually become a net-importer of medical travelers.

Patient Migration and Health System Development

Of course, why these prospective travelers would even seek treatment in the UAE is a separate matter, one shaped by a host of factors that have positioned the country to become a potential hub for medical travel in the Middle East. Some of these factors—high costs, poor standards, long waiting lines, and unavailable services—characterize the health systems of origin countries, "pushing" consumers to consider healthcare options across borders (Helbe, 2011). Other factors—ease of access, personal safety, modern infrastructure, and degree of hospitality—are particular to the destination countries, "pulling" in prospective consumers (Raza Siddiqui, personal communication, 2014). Aiding these push-pull factors, more broadly, are the structural shifts in medical travel patterns precipitated by the September 11 terrorist attacks, which resulted in fewer international patients having access to the U.S. and European healthcare markets (Ehrbeck, Guevara, and Mango, 2008; Cohen, 2014). In this vacuum emerged alternate sites that, because of their ready ability to pull in prospective travelers, became magnets for inbound travelers. The UAE, following the examples of Thailand, Singapore, and India, is but the latest among these.

As such, it may not yet be clear to local government and industry leaders the extent to which these patient flows will influence the trajectory of health system development in the UAE. On one level, these flows will shape government decisions pertaining to patient, professional, and provider mobility, requiring authorities to balance their desire to liberalize visa procedures and licensing regimes with their responsibility to regulate a rapidly expanding and highly complicated industry.

On another level, these flows will affect provider strategies concerning which emirates to enter, which patient segments to target, and which services to offer. On still another level, these flows will require both sets of stakeholders to think through their respective levels of investment in health infrastructure and human resources.

In 2010, the U.A.E. government spent almost U.S. \$2 billion—a quarter of its total healthcare expenditure for that year—to send its citizens abroad for medical care (WHO, 2012). Undoubtedly, then, inbound and outbound medical travelers are a constituency of consequence.

Methodology

Examining the origins and outcomes of this growing constituency—and the broader industry in which it operates—motivates the present study. At its core lie two interrelated research questions. First, through which mechanisms is the UAE’s medical travel industry linking international patients to local healthcare providers? And second, in what ways is this industry shaping public health, particularly as it concerns healthcare access and health system resourcing?

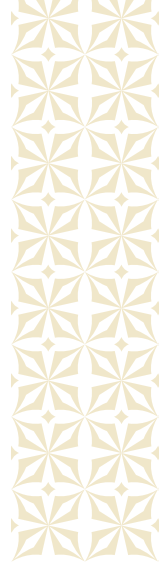
This study draws upon both quantitative and qualitative data. Quantitatively, it utilizes figures from publicly available sources, including health system data from the World Health Organization and World Bank, hospital and patient data from the UAE’s National Bureau of Statistics and federal- and emirate-level health agencies, and migration data from the United Nations and the U.A.E. Ministry of Higher Education and Scientific Research. These figures were subsequently used to construct five datasets marking trends in the supply of physical and human capital and the flow of inbound and outbound patients. Qualitatively, it relies on information obtained through 48 semi-structured interviews with government officials, healthcare executives, health professionals, medical travelers, educators, academics, and legal and business advocates. Their commentary, based on key themes emerging from the coding process and useful frameworks introduced later on, defines the analytical portions of this paper.

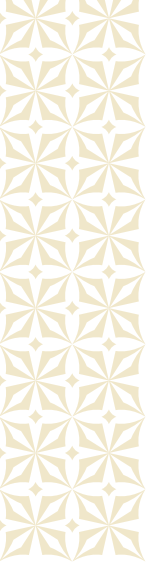
The Landscape of Medical Travel

The existing literature on medical travel in the UAE is simultaneously too broad and too specific. A documentary review of scholarly papers, industry reports, and news articles commenting on medical travel in the UAE between 2006 and 2015 returned 504 results. Of the surveyed materials, only 24% considered the UAE’s medical travel industry as a whole, with the vast majority of results focusing more generally on medical travel as a growth sector among Gulf Cooperation Council (GCC) countries or more specifically on its implementation within individual emirates. As such, no resource exists that centralizes the breadth of activities taking place across the UAE or, more importantly, the variation in models being deployed by stakeholders to carry out these activities. The following section attempts to fill these gaps by outlining the four initiatives currently shaping medical travel in the UAE.

Medical Travel Policy in the UAE

That the UAE anticipates hundreds of thousands of medical travelers arriving at its shores in the years ahead is the product of multiple initiatives launched by government bodies and private





providers. Often, these initiatives are executed independent of one another, and though this approach contrasts sharply with those of other destinations—such as Singapore and South Korea, where medical travel is largely a whole-of-country proposition housing all relevant stakeholders under a single initiative and directing their efforts toward a single purpose—it also reflects the unique character of the UAE as a federation of seven emirates.² One senior health official, when asked about the breadth of these initiatives, attributed their differences to the particular vision of each emirate’s ruler as well as the degree of autonomy that each enjoys when formulating policy (DHA official, personal communication, 2015). As a result, the landscape of medical travel in the UAE is highly variable.

Part of this variability has to do with the fragmented nature of health service regulation and delivery across the emirates. For much of the UAE’s history, management of the nation’s health system fell to a single federal entity, the Ministry of Health (MOH), whose responsibilities included regulating healthcare practices, licensing health professionals and companies, and building and managing medical facilities (Latham and Watkins, 2013). By the turn of the century, however, rapid population growth, particularly in Abu Dhabi and Dubai, had resulted in rising costs and declining standards, leading the U.A.E. government to pursue organizational changes that granted greater authority to the individual emirates (Blair and Sharif, 2013). Today, the MOH is still the chief body that oversees healthcare in the northern emirates, but in Abu Dhabi and Dubai, the functions of health service regulation and delivery are the domain of local entities established in 2007. For Abu Dhabi, these functions are split between two entities, Health Authority-Abu Dhabi (HAAD), which carries out strategy and regulation for the whole emirate, and Abu Dhabi Health Services Company (SEHA), which owns and operates all governmental facilities. For Dubai, these functions are handled by a single entity, Dubai Health Authority (DHA), with the emirate’s healthcare free zone, Dubai Healthcare City (DHCC), regulated by an internal body called the Center for Healthcare Planning and Quality (CPQ) (Fares, 2014). The diversity of these healthcare bodies, in turn, has resulted in multiple regulatory jurisdictions in which separate medical travel initiatives have developed.

At the federal level, medical travel is more aspiration than policy. The U.A.E. government has not yet launched a formal initiative promoting and managing medical travel, nor has it corralled stakeholders and marshaled resources in the same manner as other destination governments. Its aspirations, however, still shape the landscape of medical travel in the UAE. Intangibly, these aspirations advance the government’s vision of modernity, whereby healthcare is a medium through which the UAE can pursue its model of development. Such an approach is evident in the *U.A.E. National Agenda*, which champions the creation of a “world-class healthcare system” as a means to promote “economic diversification” and look beyond “traditional economic models” in fulfillment of *U.A.E.*

¹ Singapore’s medical travel initiative, titled Singapore Medicine, was a multi-agency government initiative, directed by the Singapore Tourism Board (STB), to improve the country’s competitiveness by commercializing and globalizing its healthcare sector. STB, in turn, was charged with organizing the country’s healthcare providers and marketing their services to international patients, particularly those in Southeast Asia (Lim, 2005). Similarly, South Korea’s initiative, referred to as Medical Korea, was the product of a government-led push to bolster the country’s economy by capitalizing on its biotechnology sector and advanced medical education system. The federal government subsequently adopted a national strategy, and passed a raft of legislative measures, that placed a number of existing federal ministries under the leadership of a newly created public-private body, the Korea International Medical Association (KIMA), which, among other things, provides information about the country’s healthcare offerings to prospective travelers (Handley, 2011).

Vision 2021. More concretely, these aspirations define the framework, espoused by the MOH, to support individual emirates' medical travel activities. This framework, according to MOH Assistant Undersecretary Amin Al Amiri (personal communication, 2015), consists of four elements:

1. encouraging the establishment of in-demand specialties and subspecialties;
2. marketing the initiatives of other institutions;
3. attracting top medical talent to the UAE; and
4. supporting Abu Dhabi and Dubai's health insurance programs.

Medical travel, then, represents a national effort aimed at moving the UAE beyond the hydrocarbon economy that has long fueled its rising fortunes.

How this effort translates at the emirate-level varies (see Figure 2). In Abu Dhabi, providers have focused on curbing outbound medical travel—a consequence of SEHA-owned facilities that bring international providers to local patients, and private facilities that lack the “gravitas . . . to pull in people from abroad” (SEHA, 2013; Abu Dhabi healthcare executive, personal communication, 2014). In Dubai, local and international providers, buoyed by a proactive government and robust health and tourism ecosystems, have targeted both inbound and outbound travel (Alsahraf, personal communication, 2015; Samer Mazahreh, personal communication, 2015). And in the northern emirates, where the MOH's strategic focus has largely grounded provider ambitions, only select operators in Ras Al Khaimah have looked internationally to grow their patient volumes. The emirates of Dubai and Ras Al Khaimah thus serve as the most useful cases for exploring the mechanics of medical travel in the UAE.

Figure 2: Medical Travel Initiatives in the UAE





Medical Travel Initiatives in Dubai

Dubai's emergence as a potential hub for medical travel is a decade-long endeavor that draws its momentum from the considerable direction of the Dubai government. Such direction entails both vision and execution in support of the emirate's medical travel ambitions. In terms of vision, Dubai's leadership values healthcare as both a growth sector, given the emirate's limited oil reserves, and a prestige sector, given its aim of becoming a global site for high-level services (Hvidt, 2007). It is with these elements in mind that, in 2002, High Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, gave a speech praising a then fledgling medical travel project as something that highlighted the "integrated process of development" and created "a bridge between Europe and Asia" (Al Maktoum, 2002). In terms of execution, the Dubai government has taken a top-down approach that makes use of the emirate's robust ecosystem of public and private entities to exploit synergies critical to growth of its medical travel market (Khodr, 2012). The actors participating in Dubai's latest travel initiative, for example, range from health and tourism agencies to global transport and healthcare groups (DHA, 2015). Such governmental involvement has produced an environment in which two medical travel initiatives, each advancing its own strategy through a separate set of stakeholders, are currently in play.

The emirate's older and more established initiative is DHCC. Launched in 2002 amid growing recognition of Dubai's limited healthcare facilities, DHCC was envisioned as an "integrated center of excellence for clinical and wellness services, medical education, and research" (DHCC, 2015). In support of these objectives, the City was set up as a free zone, using legal and economic inducements—namely, complete ownership of facilities, tax-free and without the requirement of local partners—to convince international partners to establish operations within its confines (Khodr, 2012).

These international partners, in turn, play a decisive role in DHCC's medical travel strategy—partly through the international patient markets they tap via the prominence of their brands, partly through the quality standards they set by importing their practices and cultures, and partly through the comprehensiveness of services they bring to a region lacking advanced care (Mazahreh, personal communication, 2015; Alsharaf, personal communication, 2015). Comprehensiveness is especially important: DHCC's 130 clinical business partners (hospitals, day centers, specialty clinics, and diagnostic labs) operate in close proximity to its 200 non-clinical partners (spa, wellness, and hospitality services), so that, according to Fatma Alsharaf (2015), head of DHCC's medical travel operations, "It's easy for the patient to travel from one place to another and receive a full range of services." In 2014, DHCC facilities treated 1.2 million such patients, 15% of which were classified as inbound travelers (DHCC, 2015).

More recently, DHA unveiled its own initiative, the Dubai Medical Tourism Program, to expand the number of stakeholders taking part in Dubai's nascent medical travel industry. Created in 2012, the program aims to "position Dubai as a globally recognized destination for elective health and wellness treatments" (DHA, 2015). Although this emphasis overlaps considerably with that of DHCC, it also reflects the emirate's existing capacity—in terms of physical and human infrastructure—to support outpatient services, like cosmetics, over more clinically complex procedures, like cardiovascular surgery (Deloitte, 2011; Alpen Capital, 2014).



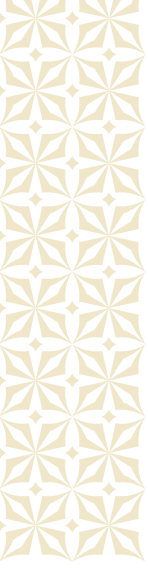
The core of DHA's medical tourism strategy, as such, is to push those private providers located outside DHCC into international markets. Part of this approach concerns coordination. DHA established an internal body, the Dubai Medical Tourism Office (MTO), in August 2014 to increase the attention given private providers targeting inbound travelers (Amna Al Suwaidi, personal communication, 2015). Another part of this approach concerns promotion. MTO manages the Dubai Medical Tourism Club (DMT), a voluntary association of private hospitals, polyclinics, and specialty centers whose members receive exclusive access to DHA marketing products, including networking opportunities and listing on DMT's official website (DHA, 2015). Coordination and promotion, according to MTO Director Layla Al Marzouqi (personal communication, 2015), are about bringing providers "under one roof to complement each other's needs" and to "collectively represent Dubai with world class health service." The desired outcomes, as DHA sees it, are two-fold: to turn Dubai into the Middle East's premier destination for medical travel by 2016; and to capture 500,000 medical travelers and position Dubai as a top-ten destination in the world by 2020 (Al Suwaidi, personal communication, 2015).

Medical Travel Initiatives in Ras Al Khaimah

In contrast to Dubai, Ras Al Khaimah's foray into medical travel is relatively new and, for the moment, has only a passing relevance to the emirate's development arc. Its medical travel activities, in fact, are an extension of the emirate's healthcare ventures, which themselves flow from its economic development strategy. According to RAK Hospital Executive Director Raza Siddiqui, in 2004, His Highness Sheikh Saud bin Saqr Al Qassimi, U.A.E. Supreme Council Member and Ruler of Ras Al Khaimah, "wanted to promote Ras Al Khaimah as a destination for investment and for tourism, and he thought—and he was 100% right—if the healthcare infrastructure is not good, people may not like to come to Ras Al Khaimah." He subsequently outlined "something hotel-like"—an idea that was "too futuristic for Ras Al Khaimah," given the absence of a supportive ecosystem and the presence of strict pricing regulations set by the MOH (Siddiqui, personal communication, 2014; Arpan David, personal communication, 2015). Although these barriers have not stopped the growth of private care in the emirate, healthcare groups seeking to establish facilities in the northern emirates have had to partner with government entities to assure their solvency. Two providers, the operators of separate government-owned facilities, have emerged as the emirate's lone entrants into the medical travel industry.

The first such entrant is Arabian Healthcare Group (AHG), a Ras Al Khaimah-based healthcare management firm founded in 2011. In the years ahead, AHG anticipates overseeing, among other entities, a portfolio of UAE-wide specialty centers and a global chain of medical clinics. Currently, however, the centerpiece of its network is RAK Hospital, a multidisciplinary hospital founded in 2007 as a joint venture between the government of Ras Al Khaimah and ETA Star Healthcare of Dubai. AHG operates the hospital in partnership with Sonnenhof Swiss Health, their mission being the provision of a service that "seamlessly blends premium hospitality with world-class healthcare" (U.A.E. Superbrands Council, 2014).

Initially, this mission had very little connection to medical travel. The hospital, according to AHG CEO Raza Siddiqui (personal communication, 2014), focused on providing medical care for the emirate's and, later, the UAE's population. But by 2011, with the hospital's reputation well-



established locally, AHG increasingly saw the value of medical travel to its operational model: inbound medical travelers could broaden the hospital's patient pool, permitting it to maintain otherwise infeasible specialty departments by, first, attracting the medical talent needed to staff them and, second, employing differential pricing to offset their financial burden (David, personal communication, 2015). RAK Hospital has subsequently relied on its collection of international clinics and the emirate's expanding tourism and hospitality offerings to spearhead the emirate's only inbound medical travel initiative, which, in 2014, received under a thousand such travelers each month (Chaudhary, 2015; David, personal communication, 2015).

A second and rather surprising entrant is Seoul National University Hospital (SNUH), a private academic medical center originating in South Korea. In mid-2014, SNUH was awarded the management contract for Sheikh Khalifa Specialty Hospital (SHSH), the Ras Al Khaimah-based tertiary care referral hospital regulated by the MOH and funded by the U.A.E. Ministry of Presidential Affairs (MOPA). To highlight SNUH's presence as a player in the inbound medical travel market would seem both unusual and misguided—unusual because its guiding mission for decades has been to “raise medical service *in South Korea* to world-class levels” (emphasis mine), and misguided because the aim of SKSH is not to attract inbound travelers but *to capture outbound ones* (SNUH, 2010). As such, SNUH would seem to be out of its element in the UAE.

Its presence, however, signals an important development in “global medicine,” a strategy first advanced by the likes of Harvard Medical International and Johns Hopkins Medicine International (Ackerly, 2011). SNUH's footprint in the UAE is the result of the Korean government's broader effort to market the “Medical Korea” brand of healthcare to GCC residents—a move that, in practice, means bolstering Korea's own inbound travel market by stimulating the UAE's outbound one (Handley, 2011). Its presence, therefore, complicates the UAE's approach to health system development via medical travel, particularly as the Korean Ministry of Health and Welfare charts a path that seeks to attract 1 million medical travelers, many from the UAE, by 2020 (Jung, 2014).

The Mechanics of Medical Travel

The task of attracting medical travelers—that is, of stretching the traditional doctor-patient relationship across international borders—is a tremendous undertaking, requiring governments and healthcare groups to construct transnational pipelines linking patients to providers. The success of these pipelines often rests on the ability of a medical travel destination to answer the following questions: 1) How does it establish its reputation in a location not known for high-quality services; 2) How does it bring patients from their backyards to its own borders; 3) How does it deploy physical and human capital in a resource-limited setting; and 4) How does it add coherence to such a complicated industry? The answers to these questions highlight four particular elements of the medical travel pipeline that, in general, illuminate the logistics of medical travel and, in the case of the UAE, illustrate the number of forms that medical travel can take.

Internationalization

Quality concerns, more than anything else, shape patient attitudes toward medical travel. Indeed, prospective travelers, depending on the urgency of their healthcare needs, may compromise on

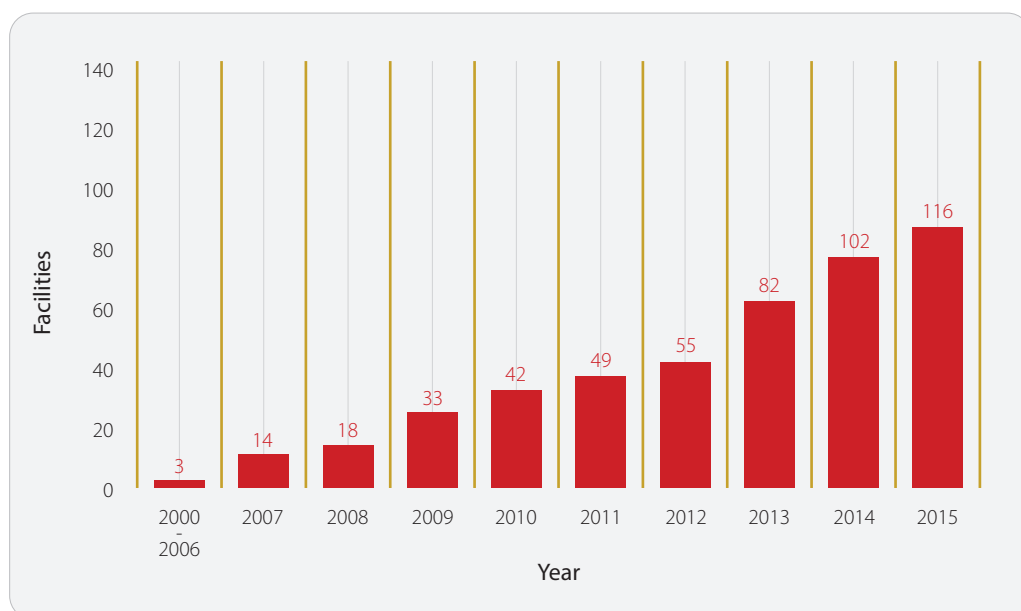
matters like cost, hospitality, and navigability when evaluating destination services, providers, and countries. But the imperatives of quality are so paramount that the inability of destinations to provide—and to project—top-notch facilities and talent is a “major impediment to the emergence of a global marketplace for health services” (Turner, 2010; Bookman and Bookman, 2007).

This gap between reality and perception is on display in the UAE, where rising standards of care are obfuscated by the high degree of heterogeneity characterizing its healthcare system. This heterogeneity is evident in the country’s host of regulatory jurisdictions, which invite inconsistencies in hospital licensing and physician credentialing (EIU, 2015). It is evident in the emirates’ diversity of demographics, which complicate health professionals’ interactions with patients (El-Amouri and O’Neill, 2011). And it is evident in providers’ assortment of business models, which instill dissonant treatment cultures across facilities (SKSH analyst, personal communication, 2014; Ackerly, 2011). Signaling quality to patients, then, is a priority for the UAE’s aspiring medical travel providers.

Though signaling can take many forms, for most aspirants, the method of choice is to internationalize their value propositions—that is, to portray their brands not as *locally superior* but, instead, as *globally competitive*. Rhetorically, this takes the form of “marketing hype,” with hospitals describing themselves as “world-class” and their technology as “best-in-class” (Yap, personal communication, 2015). More concretely, however, this strategy hinges on the number of international affiliations that destinations can summon. Some destinations accomplish this through co-branding, spearheading relationships with prominent international providers that “confer instant status” upon them (Turner, 2010). DHCC chose this path when it decided to partner with Harvard Medical International, a division of Harvard Medical School, in 2003 to create an academic medical center in the City (Crone, 2008). Other destinations rely on the international credentials of their talent pool, hoping to convince prospective travelers that their level of service is comparable to that found in advanced economies (Mazahreh, personal communication, 2015). Raza Siddiqui (personal communication, 2015) of AHG notes RAK Hospital’s interest in recruiting German physicians—a move that will help diversify its physician pool composed largely of South Asian expatriates.

But the primary mode through which U.A.E. providers internationalize their brands is international accreditation. Accreditation refers to the “process by which an impartial entity assesses healthcare organizations to check if they meet a particular set of standards” (Bookman and Bookman, 2007). In the arena of medical travel, the Joint Commission International’s (JCI) stamp of approval carries the most weight. A global non-profit founded in 1994, JCI provides a range of educational and advisory services to help providers improve their standards for patient safety and quality of care. JCI accreditation has become increasingly important in the UAE, where a growing number of providers have become accredited (see Figure 3). Part of this push comes from above: DHA requires that all hospitals, within two years of opening, be internationally accredited, a measure certain to aid the efforts of MTO (EIU, 2015). Part of this push comes from below: RAK Hospital is accredited by JCI and by Swiss Leading Hospitals, adding additional “structure,” as Siddiqui (personal communication, 2015) terms it, to the hospital’s “policy, procedure-based” approach to healthcare management. As a whole, this push permits the UAE to project high-quality care so that prospective travelers will consider it among their destination options.

Figure 3: Growth of JCI-Accredited Facilities in the UAE



Facilitation

The pushes and pulls of globalized healthcare help explain the broader appeal of medical travel but have less to say about the point at which a patient says yes to a particular destination—and how she arrives at that yes. Much about that decision turns on access to information and familiarity with the destination. According to Snyder et al. (2012), the complexity of the industry is such that international patients must “navigate a bewildering array of regulatory environments, accreditation systems, and facilities in deciding whether and when to seek care.” In addition to these challenges, patients must also consider clinical barriers, such as evaluating treatment options, and logistical hurdles, including communicating across language divides and arranging transportation and accommodation (Bookman and Bookman, 2007).

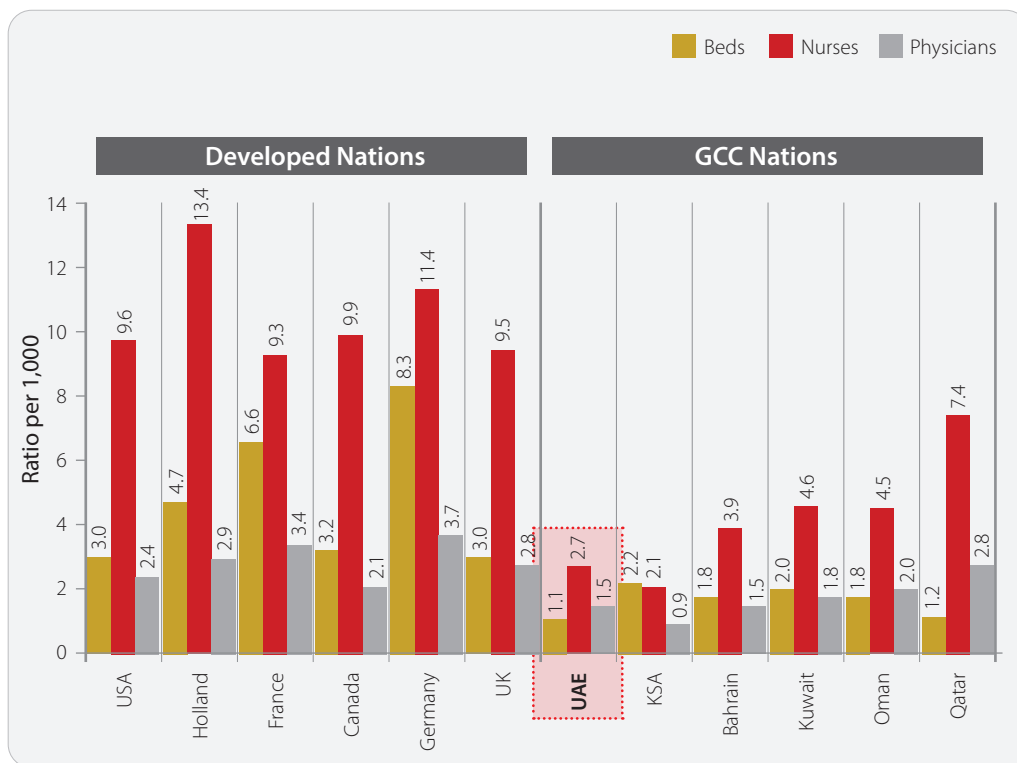
For the UAE in particular, a 2010 study of inbound travelers in four countries reported “finding information” and “travel and accommodation” as the primary obstacles to their selection of the UAE as a destination (Alsharif, 2010). These findings comport with the responses of a recent American medical traveler to DHCC, who identified “comfort” in and the “navigability” of Dubai as the chief reasons for her eventual choice (DHCC patient, personal communication, 2015).

Medical travel facilitators—also referred to as brokerages, companies, or planners—help patients navigate these barriers. Their purpose, as intermediates between patients and providers, is to “take clients from high-cost healthcare settings, coordinate travel to less expensive health care facilities, and charge fees for organizing transportation, accommodation, and treatment” (Turner, 2010). They function much like travel agencies in this regard, with most possessing at least some expertise in concierge services. Moreover, as actors in a fluid and unregulated field, they conform to no particular business model (Snyder et al., 2012).

In the U.A.E. context, two particular models stand out. One model finds the facilitator operating as a third party entity. DHCC, for example, partners with a facilitator firm called Salamatak to advertise its clinical offerings in target markets, communicate with prospective patients seeking additional information, and oversee traveler itineraries to and from Dubai. In addition to its facilitator role, the firm, according to Business Development Manager Samer Mazahreh (personal communication, 2015), has adopted a screener role, too, evaluating providers based on quality of services and partnering with a select group that it then refers to interested travelers.

A second model of facilitation locates the intermediary in a specific department within the destination healthcare provider. Often, these departments include the term “international” in their titles and cater to the health and hospitality needs of international clientele. In Ras Al Khaimah, RAK Hospital has an International Patient Coordination Department, created in 2010, that provides inbound medical travelers with comprehensive travel packages covering transportation, lodging, and the medical treatment being administered (Siddiqui, personal communication, 2015). These services are supported by AHG’s global network of facilities—15 clinics spanning locations in Africa and the Eastern Mediterranean—which permit the hospital to advertise its clinical offerings abroad and to provide its international patients with a range of concierge services (David, personal communication, 2015). Unlike the first model, whereby Salamatak receives a percentage share of travelers’ payments directly from the destination provider, AHG sets the prices of, administers directly, and then receives full compensation for its travel packages (Mazahreh, personal communication, 2015, David, personal communication, 2015).

Figure 4: Healthcare Supply Across Select Countries



Source: World Development Indicators 2012, Colliers International Analysis 2013



Partnerships

At the heart of global medical travel is the paradox that the world's lesser-developed countries are operating in a market—healthcare—where “developed,” “advanced,” and “modern” are part and parcel of the services they are trying to sell. And remarkably, destinations like Thailand, India, and Malaysia have managed to persuade medical travelers that their health sectors—stocked with state-of-the-art facilities and highly qualified personnel—stand apart from the perceived underdevelopment of their political and economic systems (Connell, 2007).

The UAE faces a similar challenge, having to confront a decades-old reputation for inadequate facilities and insufficient talent. In recent years, the U.A.E. government has made addressing these shortcomings a priority, nearly doubling its healthcare budget between 2007 and 2012 while also encouraging greater participation of the private sector (Colliers International, 2013; EIU, 2015). Still, the country's supply shortages persist, as these investments have yet to place its healthcare system on par with those found in Europe or in parts of the GCC (see Figure 4). For a country aspiring to raise its medical travel profile, then, the UAE faces the difficult task of establishing medical oases in a relatively barren healthcare landscape.

One approach for realizing this aspiration has been destination country partnerships with international providers to create pockets of healthcare excellence. These pockets enable destinations to leverage the management cultures, the clinical practices, and even the medical talent of these providers to inject physical and human capital into resource-poor settings (Merritt et al., 2008; former Al Ain healthcare executive, personal communication, 2013). U.A.E. governmental bodies have partnered with a number of providers—from Johns Hopkins Medicine International to Fresenius Medical Care—and, in the process, have shown how these injections play out.

One type of injection might be said to leave a “light mark” on the destination country and takes the form of management contracts permitting international providers to run government-owned facilities. SNUH's entry into the emirates is illustrative: it signed an agreement with HAAD in 2011, paving the way for patient referrals to Korea; then created a patient referral center in Abu Dhabi in 2013, increasing its responsiveness to outbound traveler inquiries; and finally took over as SKSH's operator in 2014, directly overseeing healthcare delivery to locals (SKSH analyst, personal communication, 2014). This process has subsequently brought the emirate a stock of technological and human capital previously unavailable to it. Of course, this stock lasts as long as the management contract lasts, and with SNUH's contract set to expire in 2019, its lasting contribution is not so much the transfer of infrastructure but, rather, of knowledge.

Another type of injection might be said to leave a “heavy mark” and is most evident in the branch campuses that international providers establish overseas. In DHCC, Moorfields Eye Hospital, the renowned ophthalmology center based in London, has followed this approach. It opened its clinic in 2007, initially providing a limited range of outpatient services while referring surgical patients to its London location. Rise in patient figures, however, has coincided with the London hospital sending its top surgeons to Dubai on temporary rotations, enabling the branch campus to keep a permanent stock of consultants in-country (Moorfields Eye Hospital Dubai, 2015; DHA official, personal communication, 2015). Moorfields, then, provides the UAE with a more lasting contribution in the form of both physical and human capital. Importantly, both types of

injections reveal the emphasis providers place on scaling operations to match demand—and on transplanting quality in order to begin cultivating a medical travel presence.

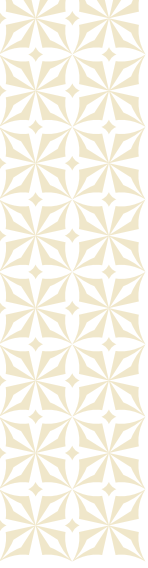
Ecosystems

The transnational character of these medical travel pipelines means that international patients are exposed to far more than the healthcare systems of their destination countries. To some, this fact is apparent in the widely used descriptor “medical tourism,” implying patient engagement with destinations’ tourism sectors—and all the additional actors, from hoteliers and airline operators to customs and tourism authorities, associated with them (Cohen, 2008). To others, medical travel is the business side of healthcare made apparent, bringing non-traditional government bodies, like public research institutes, and special interest groups, such as trade associations, into the healthcare fold (Cohen, 2014).

The UAE’s medical travel industry offers a similarly variegated scene, complicated by the country’s decentralized policy process. As a result, the stakeholders involved in Dubai’s medical travel initiatives are more numerous than, and operate differently from, those tied to Ras Al Khaimah’s—different in terms of what they care about, whom they work with, and how they get things done. Even within each emirate, it is hardly a given that stakeholders are working toward a common purpose.

The interactions among these stakeholders to encourage medical travel form a kind of organizational ecosystem. This medical travel ecosystem is shaped by the breadth of players involved, the means by which they communicate, and the autonomy they enjoy in pursuing individual and shared goals (Mars et al., 2012). For destination countries, it is not necessarily the case that an ecosystem be present or, if present, healthy for their medical travel industries to succeed. The examples of Thailand and Singapore, whose industries matured quite differently, suggest that no single ecosystem model is a guarantor of success (Turner, 2010; Yap, personal communication, 2015). The value of exploring these ecosystems, however, lies in what they say about stakeholder coordination and its impact on pipeline development. With Dubai and Ras Al Khaimah presenting distinct ecosystems at different stages of development, the subsequent evolution of their pipelines carries added significance.

Dubai presents a relatively robust ecosystem in which medical travel is widely supported, government-driven, and centrally organized. First, both of Dubai’s medical travel initiatives benefit from the emirate’s expansive network of public, private, and grey entities. Administrators of both DHCC and DHA cite Dubai Tourism and Commerce Marketing, Dubai Airports, and the Emirates Group, among others, as key collaborators in their initiatives (Alsharaf, personal communication, 2015; Al Suwaidi, personal communication, 2015). Second, both initiatives follow from government directives and are overseen by members of Dubai’s ruling family. Such government involvement is a consequence of Dubai’s commercial history: its rise as a regional entrepôt brought considerable power to the emirate’s merchant class, giving way to a state structure whereby the ruling family manages public-private ties by directly owning businesses and/or placing trusted advisors at their helm (Hvidt, 2007). And third, these initiatives take their cues from centralized bodies, DHCC from the Strategy and Partner Development Department and DHA from MTO. These bodies are relatively new, resulting from DHCC’s rocky rollout—when



its leadership prioritized real estate development over healthcare quality—and administrators' subsequent recognition that a coordinating mechanism was needed to harmonize stakeholders' diverging interests (Wainer, 2014; Langfield, 2014). The above attributes, in turn, help explain the level of importance given to medical travel, such that the Dubai Government treats it as an emirate-wide priority and expects its growth to elevate the profile of the entire emirate.

In Ras Al Khaimah, by contrast, these attributes are largely absent. Where Dubai provides medical travel aspirants with a sprawling network of institutions to lean upon, Ras Al Khaimah offers but a fraction of executive agencies and state-owned enterprises to work with; where Dubai spearheads healthcare projects under the direction of its ruling family, Ras Al Khaimah depends on the MOH for health sector reform; and where Dubai entrusts its burgeoning travel initiatives to coordinating departments, Ras Al Khaimah permits its industry to move forward without a centralizing presence. Consequently, in Ras Al Khaimah's ecosystem, according to RAK Hospital Executive Director Raza Siddiqui (personal communication, 2015), "There's nothing except us."

The absence of a supportive ecosystem, however, has not stifled the emirate's development of a medical travel pipeline—it has merely altered its approach. First, the local government's limited role in healthcare means individual operators craft medical travel strategy on their own. Such an environment affords an operator like AHG the flexibility to scale medical travel as it sees fit—a departure from Dubai, where some providers face pressure to be supportive of medical travel despite its seeming irrelevance to their business models (Dubai healthcare executive, personal communication, 2015). Second, the emirate's sparse network of institutions means its medical travel ambitions grow in conjunction with its public and private sectors. Siddiqui (personal communication, 2015) concludes as much when noting that RAK Medical and Health Sciences University and the Department of Economic Development have a role to play in the local industry, but have yet to reach the level of maturity required to begin prioritizing medical travel. And finally, the emirate's lack of a coordinating body means cross-sectoral collaboration takes place through *ad hoc* communication. In the span of a year, for example, Steven Rice, former CEO of the emirate's Tourism and Development Authority, and leaders from RAK Hospital met six or seven times to discuss medical travel, but did so informally and of their own accord (Steven Rice, personal communication, 2015). Although these attributes limit the emphasis Ras Al Khaimah can place on medical travel, they also create a space in which the local industry can mature in a capacity-constrained setting.

The Equity Implications of Medical Travel

As the number of medical travel destinations increases, so too does the number of national health systems in contact with international patients and providers. Their presence, according to a growing body of research, bears potentially far-reaching implications for health equity in both origin and destination countries (Johnston et al., 2010; Hopkins et al., 2010; Lunt et al., 2011). Unfortunately, this perspective is absent in the UAE, where talk of medical travel centers more on business strategy than public health. A review of eight U.A.E. media sources, including the country's four broadsheet newspapers, over the past three years found that none of their 374 articles on the topic of medical travel raised potential equity concerns. It is thus unclear whether local stakeholders are aware of the public health implications of their medical travel initiatives.

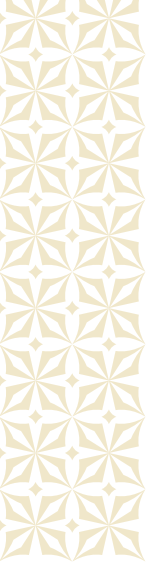
This section brings the examples of Dubai and Ras Al Khaimah into the discussion. It follows the agenda outlined by Cohen (2011), who poses six empirical questions that capture medical travel's equity impacts, as well as the line taken by Flood and Chen (2013), who, in attempting to answer these questions, supply useful instruments to draw important conclusions. Although the evidence offered below is largely anecdotal in nature, its aim is to add the U.A.E. case to the bioethics literature and to create a template upon which future area studies can make more quantitative contributions.

Siphoning Healthcare Resources

The arrival of inbound medical travelers calls into question the ability of destination country health systems to provide quality care to local patients. According to a 2002 report by the World Health Organization (WHO), these medical travelers may spur additional investment in local health systems, but they may also produce a “dual market structure” where a higher-quality segment is incentivized to cater to international patients and wealthy nationals while a lower-quality segment is left to care for the poor (Chanda, 2002). These two segments may manifest within healthcare facilities, when human resources are allocated disproportionately among particular medical departments, as well as between facilities, when physical resources are deployed in certain locations over others. To what extent, then, are inbound medical travelers competing with the local population for finite healthcare resources?

The UAE's long-standing shortage of healthcare professionals suggests that an influx of inbound travelers may indeed stretch the country's limited supply of human capital. Between 2007 and 2013, there were roughly 25 physicians per 10,000 residents practicing in the UAE—a figure well above the regional and global averages of 13 and 14, respectively (WHO, 2015). That figure, however, belies the country's rapid population growth—and the challenges of hiring enough professionals to keep up with it. In 2011, Dubai's stock of physicians was more than adequate to meet the emirate's demand for healthcare. Yet, by 2020, the emirate will need nearly 6,800 additional physicians to meet a healthcare demand driven partly, according to DHA (2014), by its medical travel activities. Meanwhile, although comparable data for Ras Al Khaimah is unavailable, a local MOH official (personal communication, 2015) reported that the emirate's district office had sent manpower requests to the MOH central office for three straight years, only to receive no response. Persistent shortages in the emirate's government hospitals may lead the upper segment of the local population to seek care exclusively at RAK Hospital, where inbound travelers contribute to the facility's already high occupancy rate (Rice, personal communication, 2015).

Beyond their numbers, however, inbound travelers also tend to consume healthcare resources at a greater rate than local patients. This is hardly surprising, considering the lengths to which destination providers must go to compete for travelers with a bevy of international options (Flood and Chen, 2013). As such, RAK Hospital has set up a VIP Ward for its international patients who, notes one assistant nurse (personal communication, 2015), are “rendered extra care and extra treatment” in the form of several “head-to-toe” screenings and, for elderly patients, a medical team consisting of “lots of doctors.” Given AHG's “personalized, customized, individualized” approach to care for all patients, the above procedures would not appear out of the ordinary (Siddiqui, personal communication, 2014), but medical travelers are a self-select group: their lack of a medical history with the hospital, coupled with their tendency toward clinically complex cases, means customized



care for them will likely tap more resources than it would for local patients who, observes a former staff nurse (personal communication, 2015), often present with simple conditions.

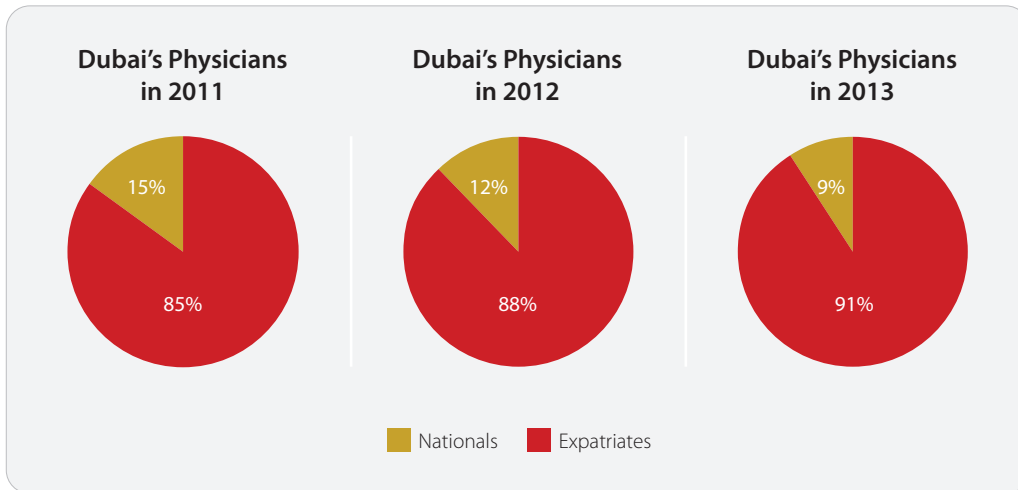
Still another way in which travelers tradeoff with locals on healthcare is in the types of treatments they incentivize investors and providers to make available. The main causes of death for residents of the UAE include cardiovascular disease, traffic accidents, cancers, and respiratory illnesses (Loney et al., 2013). International patients, on the other hand, typically cross borders for the sake of elective treatments like cosmetic, orthopedic, and dental services (Turner, 2007). With little overlap in these two clinical profiles, providers must choose between treating only local patients or a combination of local and international ones. In Dubai, that choice is clear: the emirate boasts a plastic surgeon-to-population ratio nearly three times that of the United States, and DHA projects an oversupply of plastic surgeons over the next decade (Batrawy, 2015; DHA, 2014). These figures are problematic when measured against the growing deficit of specialists—particularly in cardiology, emergency medicine, and endocrinology—expected in the years ahead (DHA, 2014).

Despite the equity concerns noted above, a few mitigating circumstances merit consideration. First, the continued preference of U.A.E. nationals to seek healthcare abroad reduces some of the competition local patients might otherwise face from inbound travelers. Should improvements in local care reverse the tide of outbound travel, however, this competition for finite resources may actually intensify. Second, in contrast to the health systems of other emerging economies like Brazil, Russia, India, and China, public hospitals in the UAE are generally of higher quality than private ones—measured in terms of bed capacity and the provision of advanced healthcare services and medical equipment (DHA, 2014; EIU, 2015)—potentially shielding local residents from the equity harms resulting from medical travel in the private sector. Of course, with the UAE moving toward a two-tiered health system—as public hospitals increasingly cater exclusively to U.A.E. nationals—the population with the fewest healthcare options, expatriate residents, is also the one most vulnerable to medical travel’s equity effects (Bell, 2014a; Bell, 2014b). And third, the outsize role of the U.A.E. government in healthcare means rural locales, often the biggest losers of medical travel industries typically incubated in urban settings, are not necessarily casualties of underinvestment here. The MOPA’s plans to establish five advanced care hospitals, staffed by comparatively well-compensated physicians, in the northern emirates may help blunt the emigration of physical and human capital likely to accompany Dubai’s rise as a medical travel hub (SKSH analyst, personal communication, 2014).

Exacerbating Internal Brain Drain

Providers with international patient populations are often magnets for local health professionals. Buoyed by their concentration in urban centers, their connectivity to international markets, and their revenue models as private entities, these providers are well-positioned to capture more profitable market segments, like inbound travelers, and then pass the rewards on to their healthcare workforce in the form of attractive remuneration packages (Pocock and Phua, 2011). Consequently, health professionals in search of higher standards of living are pulled away from facilities located in the public sector and in more rural communities. This internal brain drain, according to Woodward et al. (2002), may be responsible for “reducing staffing levels, lowering staff quality, and/or raising salary costs for the public sector.” To what extent, then, is inbound medical travel contributing to the internal migration of local health professionals?

Figure 5: Composition of U.A.E. Healthcare Workforce

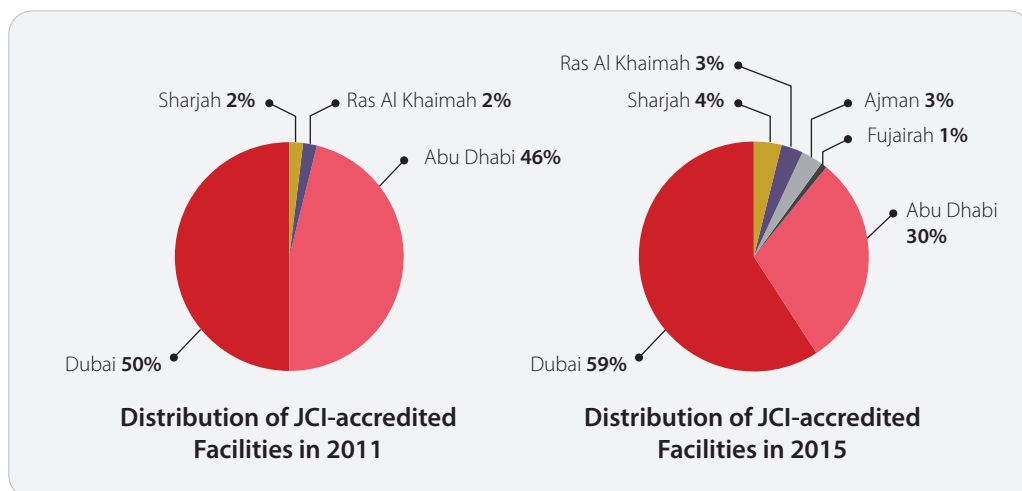


The particularities of the UAE's healthcare system preclude any clear answers to this question. Absent medical travel, local providers oversee a workforce that tends to migrate from the private to the public sector and from the more rural northern emirates to the more urban southern emirates. Unsurprisingly, these patterns reflect standards of living, with the Labor Attaché of one Consulate-General observing such movements among nurses originating from his country (personal communication, 2015). The growth of medical travel, as such, will do little to erode the allure of government hospitals.

These patterns aside, the UAE's relatively rigid labor market hinders migration across emirates and sectors. Part of this results from the country's fragmented system of health regulation. To practice in the UAE, physicians and nurses must be licensed by the MOH, HAAD, or DHA, but because none of these bodies recognizes the others' licenses, health professionals seeking to work in another jurisdiction must obtain a new license. This process, however, is so labor intensive—one private provider's chief human resources officer (personal communication, 2015) reported waiting times of "at least six months to a year or more"—that professionals are just as likely to consider positions in Qatar and Saudi Arabia. Part of this rigidity, too, is tied to demographics (see Figure 5). In Dubai, like the rest of the UAE, the workforce is heavily expatriate, with roughly 91% of physicians and 99% of nurses, in 2013, coming from abroad (DHA, 2014). With the entry point of most of these expatriates being the private sector, those able to obtain licenses begin in private facilities— but find few opportunities to leave.

While medical travel may have little impact on public-to-private-sector migration, its effects may be felt—and positively so—for rural to urban migration. According to LinkedIn's *Talent Trends 2014*, an unusually high percentage of fully employed professionals in the UAE are "actively looking for their next role." Driving their choice of new employer are, among other things, "better compensation and benefits" and "more challenging work" (Srinivasan, Gager, and Ignatova, 2014). As such, medical travel may offer rural providers, like AHG, a chance to exploit these drivers and capture talent. First, differential pricing for international patients permits AHG to reinvest profits

Figure 6: Distribution of JCI-Accredited Facilities in the UAE



in compensation packages for consultants otherwise drawn to urban facilities (David, personal communication, 2015). And second, the frequency of clinically complex cases found in its international patient pool enables AHG to attract specialists wary of becoming “deskilled” in a setting that presents too few advanced cases (David, personal communication, 2015; DHA official, personal communication, 2015). Working against AHG, however, is the growth of medical travel in other emirates, approximated by the number of JCI-accredited facilities found elsewhere (see Figure 6).

Expanding Healthcare Supply

The equity harms of medical travel are of concern only when destination countries are unable to accommodate the combined demand of local and international patients. As such, their supply of physical and human capital must increase in tandem with the rise of inbound travelers—or else risk crowding out local patients. To some, medical travel invites few risks and many rewards: it may bring in new sources of investment that benefit local health systems and, in turn, local patients (Johnston et al., 2010). But to others, these investments, by expanding the private sector, may induce destination governments to reduce their expenditure on healthcare, effectively gutting public health initiatives (Flood and Chen, 2013). Government policies, to be sure, affect how these outcomes play out in the public and private sectors. To what extent, then, is local healthcare supply expanding to meet the system-wide pressures generated by inbound medical travelers?

In one sense, healthcare supply is shaped by the U.A.E. government’s long dominant position in—and expansion of—the health sector. Since 2009, roughly 70% of total healthcare spending in the UAE has come from government bodies whose healthcare expenditures make up almost a tenth of total government spending (WHO, 2013). These figures compare favorably with the spending habits of upper middle- and high-income countries, though that may soon change. In the years ahead, greater participation from the private sector is expected, driven partly by a supportive government and partly by a growing health insurance market. Such a move, however, is unlikely to

displace the commanding role of the government in healthcare (EIU, 2015). Even in Dubai, where local officials eventually want 70% of all healthcare services to be provided by private entities, the Dubai government continues to spend over a tenth of its budget on healthcare—almost half of which, in 2012, went toward inpatient services that remain underdeveloped in the private sector (DHA, 2014). The growth of medical travel, as such, has yet to occasion a government retreat from healthcare.

But healthcare supply, in another sense, is less about inputs like spending and more about outputs like physical infrastructure and human resources. Between 2012 and 2013, the number of private hospitals in the UAE increased by 14%, private beds by 7%, and private physicians by 28% (NBS, 2014). In the pipeline as well are many more healthcare projects, including DHA's expansion of two existing hospitals, construction of three new hospitals, and launch of 40 additional primary healthcare centers (Bell, 2013). Government policies, meanwhile, are increasingly tackling the country's talent problem. Recently, DHCC's internal regulatory body CPQ expanded its licensing framework, permitting physicians trained in Eastern Europe, the Middle East, and South Asia—regions excluded from the original framework consisting mostly of Western countries—to practice at its facilities (DHCC, 2015). And in Ras Al Khaimah, RAK Medical and Health Sciences University instituted a conversion program that enables students in non-healthcare fields to transition into the university's degree programs (Oxford Business Group, 2013). The above measures, undertaken in spite of medical travel, nonetheless fill some of the increased demand resulting from it.

That they fully meet this demand, however, is unlikely, given the breadth of human resources challenges facing the UAE. In terms of attracting talent, local policies often appear divorced from the country's unique demographics. India, for example, offers the northern emirates a wealth of medical talent with which to staff government hospitals. Yet, a host of MOH regulations—from impractical tariffs that hinder private sector development, to outdated licensing procedures that undervalue India's medical education system—work against such hires (Dubai healthcare executive, personal communication, 2014). In terms of retaining talent, local officials do not fully appreciate the country's reputation as a transit point. The UAE's high attrition rates—17% for physicians and 11% for nurses—reflect the tendency of expatriate professionals to view the emirates as stepping-stones to careers in the West (HAAD, 2014; Labor attaché, personal communication, 2015). The resulting turnover encourages poaching among some providers, thus recycling the UAE's already limited stock of human capital (David, personal communication, 2015). And in terms of training talent, local institutions lack the capacity to develop health professionals. Each year, the country's five medical schools graduate almost 400 students, but many, due to few postgraduate opportunities at home, go abroad for advanced training (Fares et al., 2014; Hamdy et al., 2010). Since GCC physicians, in particular, often choose to practice in their countries of postgraduate training, the U.A.E. health system sees little return on its medical colleges' investments (Dubai School of Government, 2010).

Curbing External Brain Drain

As destination countries work to expand their supply of healthcare, many see in medical travel a possible solution to their human resources needs. This is particularly true for lesser-developed countries engaged in medical travel. Long accustomed to watching their health professionals emigrate to locations in the West, these countries anticipate that the approach taken by

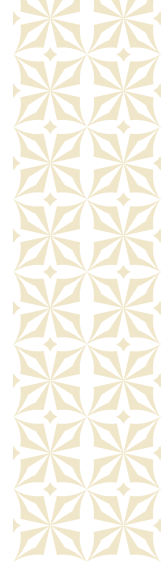
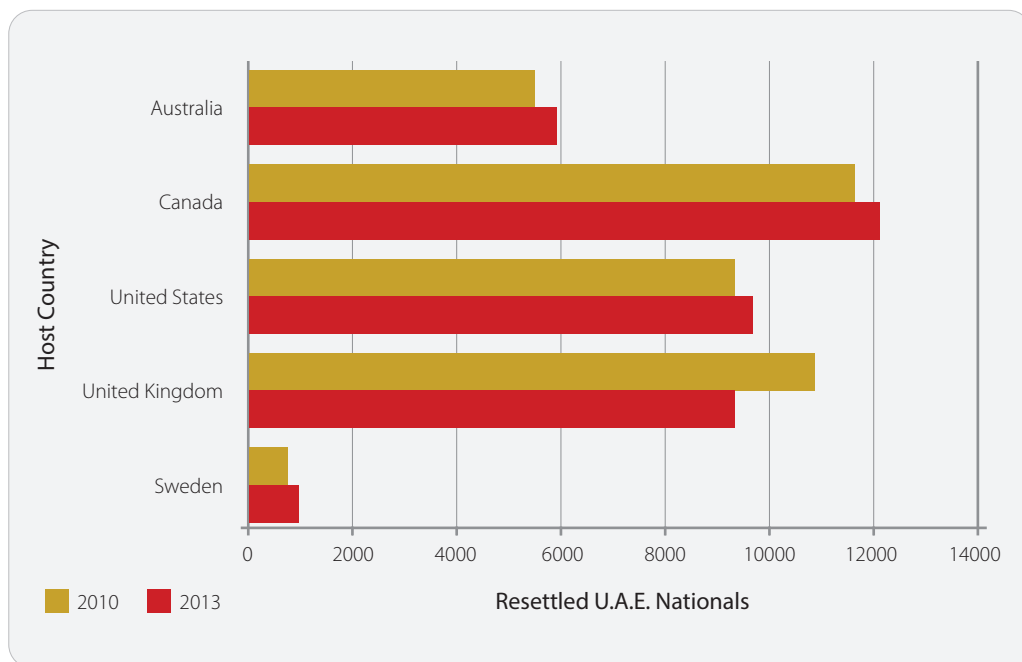


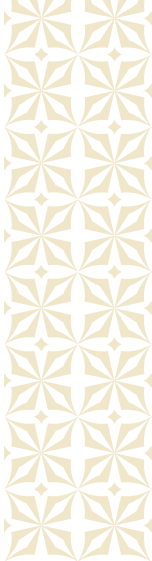
Figure 7: Growth of U.A.E. Nationals Living Abroad



destination providers will address those factors—low salaries, long hours, inadequate supplies, and insufficient training opportunities—responsible for driving away their doctors and nurses (WHO, 2006; Bookman and Bookman, 2007). This approach consists, in part, of stemming brain drain (keeping local talent in-country), of promoting brain gain (attracting international talent to practice locally), and of encouraging brain circulation (persuading local talent, now practicing abroad, to return home) (Serour, 2009). To what extent, then, is inbound medical travel reducing, or even reversing, the emigration of local professionals to health systems abroad?

Here, too, the novelties of the UAE complicate discussion of high-skilled labor migration in the field of healthcare. First are the demographics. That the country's healthcare workforce is comprised almost entirely of expatriate residents means brain gain is a given—and brain drain, an eventuality. In Dubai, for example, private providers outside DHCC hired 709 expatriate physicians in 2013, a 21% rise over the previous year (DHA, 2013; DHA, 2014). These same providers, however, may lose as many as 686 expatriate physicians the following year, based on the 17% attrition rate observed in Abu Dhabi (HAAD, 2013). Though neither figure is necessarily attributable to medical travel, the first confirms that brain gain is indeed taking place, as the emirate continues to attract a large number of international physicians. Meanwhile, the second figure suggests that brain drain, rather than abating, persists, as those factors driving the emigration of physicians remain unaffected by medical travel.

Second are the politics. In the absence of a well-developed system of higher education, the U.A.E. government has, for decades, encouraged its nationals to seek advanced training, including in the medical sciences, abroad. This strategy is premised on brain circulation—that is, that these



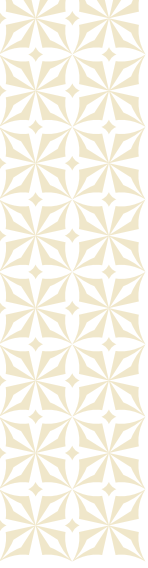
students will return to the UAE “with a wide variety of specialized skills in place to maximize the growth and diversification of the economy” (MOHESR, 2007). Yet, the number of U.A.E. nationals living in education destinations like the United States, Canada, and Australia actually grew between 2010 and 2013 (MOHESR, 2015; UN, 2013) (Figure 7). Meanwhile, the number of U.A.E. medical students training abroad totaled a mere 155 during the 2013–2014 academic year (MOHESR, 2015). As such, it is neither likely that brain circulation is occurring in the health sector nor realistic that its impact would be felt in the UAE, where the talent gap—as many as 17,000 physicians, by 2022, between Abu Dhabi and Dubai alone (HAAD, 2013; DHA, 2014)—is simply too large to be filled by the small pool of U.A.E. health professionals studying or working abroad.

Though true that medical travel may contribute little to the UAE’s quantity of healthcare professionals, the growth of inbound travel, more anecdotally, may be transforming the country’s quality of supply. RAK Hospital offers 24 distinct specialty departments ranging from the standard, like internal medicine, to the niche, like spine and orthopedic surgery. These departments, importantly, are staffed by specialists rather than general practitioners, as is the case elsewhere (MOPA official, personal communication, 2014). Only ten years ago, according to RAK Hospital’s executive director, finding such services in the northern emirates would have been unthinkable (Siddiqui, personal communication, 2015). But the imperatives of medical travel are such that the hospital must make available key specialties, staffed by appropriate specialists, to position the facility as an advanced care center in the international market. Consequently, the presence of these specialists, while hardly a remedy for the emirate’s lacking depth of talent, has added breadth where once it did not exist.

Cross-subsidizing Public Healthcare

Beyond local patients and professionals, the equity effects of medical travel extend to local healthcare systems. More narrowly, these systems are said to benefit from medical travel industries whose quality standards may prompt an upgrade of public sector infrastructure, and whose revenues may be redistributed—through taxation—to subsidize public services (Flood and Chen, 2013). More broadly, healthcare systems, especially those serving small populations, are said to benefit from the expansion of patient pools via inbound medical travelers. These expanded pools accomplish two things: first, they enable destination countries to attract specialized physicians fearful of losing their advanced skills due to an infrequency of cases; and second, they permit destination providers to maintain otherwise infeasible specialties through the cross-subsidization of medical departments (Yap, personal communication, 2015; David, personal communication, 2015). To what extent, then, are the gains from inbound medical travel being shared across the local healthcare system?

Dubai’s travel initiatives are of little direct benefit to the emirate’s public sector. That DHCC is a healthcare free zone suggests that its roughly 330 business partners—which underpin the City’s medical travel proposition—generate no tax revenue for use by the Dubai Government (Alsharif, 2010). Similarly, DHA’s private providers, though operating outside DHCC, are also not subject to corporate taxation, closing the possibility of an industry-specific levy on medical travel providers. In fact, the only subsidization that appears to be occurring is that of the private sector by public authorities. The very existence of DHCC, a tax-free zone spearheaded by the government, is an



obvious example of public subsidization of private care. Less apparent examples, however, can be found in the activities of DMT, whose members receive subsidies in the form of marketing benefits, the most recent being DHA’s “Be Beautiful in Dubai” campaign in the *International Medical Travel Journal* (2015). While these moves are unlikely to detract from DHA’s planned investments in public infrastructure, they nonetheless indicate the limited ties between medical travel and public health.

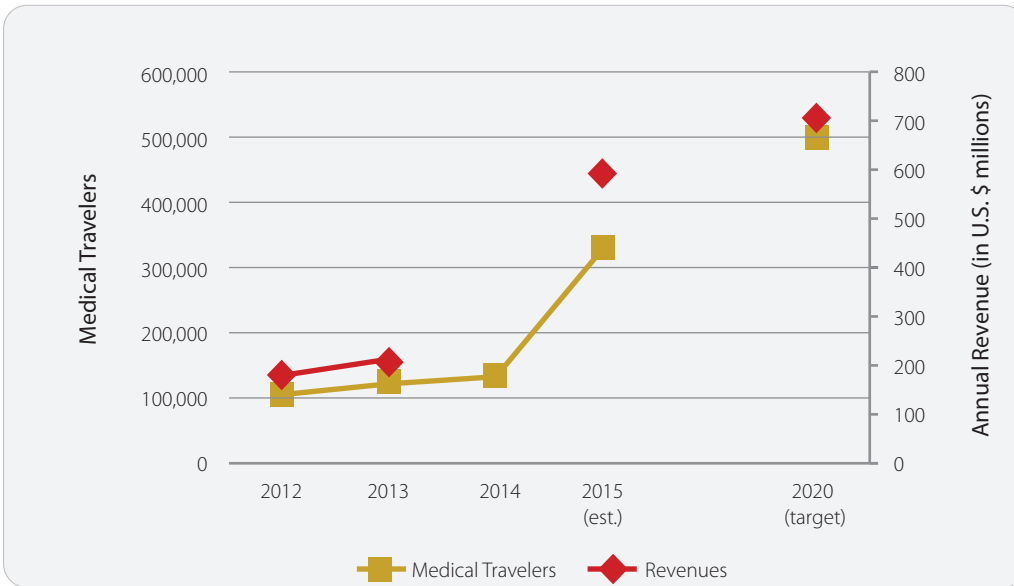
AHG’s activities in Ras Al Khaimah, by contrast, provide some evidence for the public health value of medical travel. Part of this may have to do with the relatively poor quality of public care found in the emirate—evidenced by its shortage of experienced physicians and medical equipment (Ras Al Khaimah-based staff nurse, personal communication, 2015)—thereby positioning RAK Hospital to augment local services. Part of this may also have to do with the private sector’s nascent presence in the emirate, placing a greater number of U.A.E. residents in AHG’s care. Regardless, AHG’s leadership readily notes the equity contributions of medical travel. From an operational standpoint, inbound travel permits RAK Hospital to make a business case for keeping open certain low-yield, high-cost specialties. According to COO Arpan David (personal communication, 2015), such an outcome is attributable to the caseload of, and revenues from, international patients—either directly financing insolvent specialty departments or indirectly cross-subsidizing insolvent departments through the cash flows generated by high-reward departments catering to medical travelers. That RAK Hospital even has a cardiac surgery department, which CEO Raza Siddiqui (personal communication, 2014) observes will be “a losing proposition” for a long time, is largely the result of medical travel. Such departments, in turn, are as much a boon to local patients as they are to international ones.

Spreading Economic Benefits

The spillover effects of medical travel are not limited to the healthcare arena—they may also shape the fortunes of other economic sectors. This fact is apparent in the scale of destination countries’ medical travel pipelines and the ecosystems that support them. From tourism and hospitality to transportation and education, medical travel draws upon a number of areas critical to destination country economies (Flood and Chen, 2013). Their collective impact, according to Hopkins et al. (2010), is a trickle-down of benefits, brought about through countrywide economic development, that eventually reaches the broader population. Whether medical travel policies in fact permeate other sectors and advance the condition of residents remains to be seen. To what extent, then, is the wider economy in fact benefitting from the local medical travel industry?

That medical travel aligns with Dubai’s “whole-of-country” approach to development, in principle, makes it a clear example of trickle-down at work. Anecdotally, a DHA official (personal communication, 2015) observed that, “if you bring in medical tourists, you’re increasing the revenue for emirates, you’re increasing the revenue for the hotels, you’re increasing the revenue around restaurants and shopping centers” with the purpose of “boosting the economy, in total, for Dubai.” Supporting this observation, more concretely, are DHA’s most recent revenue figures for the industry, which place its six-month total, for 2015, at U.S. \$272 million—an increase of over 50% on its twelve-month total for 2012 (Clark, 2015) (Figure 8). Yet, this approach says little about the beneficiaries of these revenues. Of the fourteen hospitals and specialty clinics

Figure 8: Economic Impact of Medical Travel in Dubai

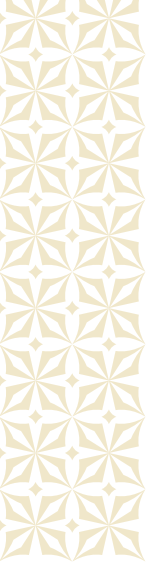


participating in DHA’s medical travel initiative, four are internationally owned, indicating that not all of the revenues generated by medical travel stay in country. Moreover, the emirate’s lack of a redistributive mechanism, like taxation, with which to reinvest these revenues is reason enough to doubt that Dubai’s economic gains are being enjoyed by all segments of the local population.

Policy Recommendations

The medical travel ambitions of the UAE are no loftier than those articulated by other emerging economies, nor have they fashioned the emirates into as prominent a healthcare destination as those found in the West. What they have done, however, is inaugurate a rather unique approach to healthcare, whereby medical travel has increasingly become a centerpiece in the UAE’s drive to improve quality across its healthcare system. At the heart of this “hub healthcare” model is a readiness to globalize the country’s health sector, a willingness to permit experimentation across the emirates, and a steadfastness to stay the course despite past setbacks. The UAE’s vision for becoming a regional hub for healthcare, then, is no longer mere aspiration.

Yet, the drawbacks of this vision turn on medical travel’s public health implications. For all the suggested benefits that accrue to local patients, professionals, and providers due to inbound travel, there exists a number of equity harms—ones that may leave local patients with inadequate access to care, local professionals with insufficient reason to remain in-country, and local facilities with inequitable shares of industry revenue. Failure to address these equity concerns will place the UAE’s promising model in the same stead as that of Singapore, whose medical travel industry, according to its former director, seemed “all about making money” and less about public health (Yap, personal communication, 2015).

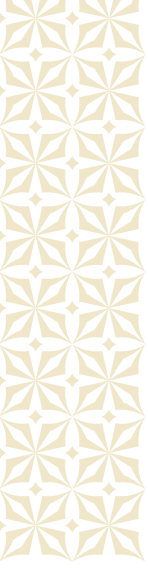


As such, local governments and providers should place a greater emphasis on health equity when devising and executing their medical travel initiatives. This emphasis should take the following forms:

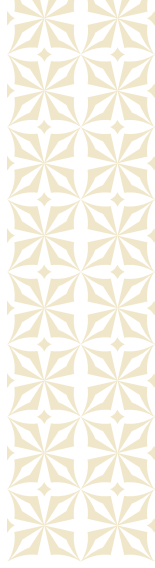
1. Adopt new health system indicators that measure healthcare supply at the level of physical infrastructure and human resources. In lieu of doctor-patient ratios, for example, stakeholders should monitor the number of specialists practicing relative to the number of patients admitted for those services, permitting administrators to spot potential human resources gaps coinciding with the growth of inbound travel.
2. Maintain a decentralized approach to medical travel that leaves individual emirates and providers at the helm of existing and future travel initiatives. Doing so enables the country to experiment with a variety of models that—while potentially harmful when applied broadly to healthcare—are useful in guiding an industry as new and niche as medical travel.
3. Develop more formal mechanisms to promote dialogue—and even collaboration—between federal entities, on the one hand, and emirate-level stakeholders engaged in medical travel, on the other. Such mechanisms should aim to address diverging policies that, at the federal level, appear to encourage outbound medical travel at the expense of local providers' initiatives.

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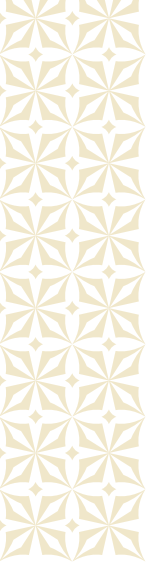
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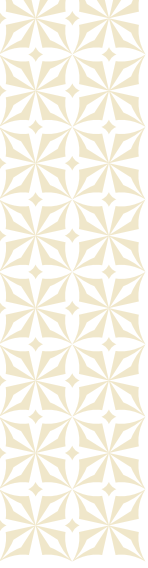
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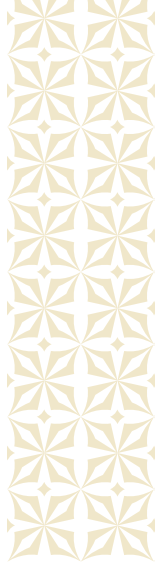
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