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AN UNDEREXPLORED SERVICE IN THE CARIBBEAN: A CASE FOR REGIONAL INTEGRATION THROUGH MEDICAL TOURISM

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ABSTRACT

Medical tourism refers to the cross-border movement of persons for improving their health. It has created thriving global industry advantages accruing to the tourist, in the form of short waiting times and affordable prices, and to the medical tourism destination in the form of revenue. This article seeks to assess the scope for a regional integration strategy based on a medical tourism cluster in the Caribbean. To do this, a study of the global medical tourism industry is conducted which includes a detailed definition of medical tourism, study of the trends in the industry, including case studies, and analysis of some of the factors needed for success in the field. An analysis of medical tourism in the Caribbean region highlights existent medical tourism institutions, the strengths within the region, advantages from engagement in the industry, and obstacles to be addressed. Ultimately, the article makes some policy recommendations for regional collaboration in the development of a successful medical tourism cluster. These policy recommendations surround the pooling of the best resources from every part of the Caribbean and on all levels through investment, skill sharing, strategic marketing, and development of tourism packages to accompany the medical aspect of the industry.

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1. Introduction

Medical Tourism, which falls under the umbrella of health tourism, refers to travel outside of one's country of residence with the specific intent of receiving healthcare (Crooks et al., 2011) involving a medical procedure. This concept dates to ancient Greece, but modern technology, changing trends and new ethical concerns have drastically changed the shape of what existed around the temple of Asclepius, the Greek god of healing. In the twentieth century, this practice generally involved travel to developed countries for treatment. However, the twenty-first century has seen the reverse of this flow as persons from developed countries such as the United States of America (U.S.), the United Kingdom (UK) and Canada travel to less developed and developing countries, in search of affordable, quick, and accredited medical service. This service includes life-saving, life-enhancing or elective procedures including organ transplants, angioplasty, orthopedic surgery, and plastic surgery.

Many countries, including those in the Caribbean,[1] have sought to capitalize on the phenomenon of medical tourism and have succeeded to varying extents. In the Caribbean, Barbados, Cuba, Antigua, Jamaica, and Trinidad and Tobago are a few of the countries that have increased their participation in the medical tourism field. This region benefits from its proximity to prominent medical tourist markets. However, the region suffers from an inability to be competitive, thus far, with prices offered in Latin America and Asia.

This article seeks to define medical tourism in detail, including global trends in medical tourism. Three case studies of developing countries with medical tourism sectors will then be examined to gain a better understanding of the use of medical tourism as a development strategy. The article will then provide an analysis of the Caribbean region including the identification of existing strengths and potential ob-

stacles for the expansion of medical tourism within the region and discussion of lessons learned from medical tourism institutions in the Caribbean region. Additionally, some policy recommendations for the establishment of medical tourism will be provided. These policy recommendations will be centered on medical tourism as a development process for individual countries and medical tourism as a Caribbean integration strategy. The recommendations will be based upon Adam Smith's theory of the Division of Labor with emphasis on comparative advantage and specialization in individual countries and the unification of countries to provide a complete and integrated service. The article will conclude with an analysis of the resources needed for future implementation of these policies.

1.1. What is Medical Tourism?

According to Bookman and Bookman (2007, p. 1), "medical tourism is an economic activity that entails trade in services and represents the splicing of at least two sectors: medicine and tourism." Simply put, it is travel to another country with the major purpose of "improving one's health" (ibid). However, medical tourism should be used to distinguish travel which involves "specific medical interventions" (Connell, 2006), including curative, elective and palliative treatments (Travers et al., 2008) such as organ transplants, heart surgery, fertility treatment, plastic surgery and dialysis which may be combined with a vacation in the destination country during recovery (Crooks and Snyder, 2011, p. 527).

In the twenty-first century, two reasons are generally cited for engagement in medical tourism. For persons within countries without universal medical insurance the key motivator is cost, while persons within countries with universal medical insurance seek to avoid long wait-times and to access services which are not available to them in their home countries (Crooks et al, 2011, p. 726). As such, countries offering procedures which are in high demand at costs that are much lower than those in developed countries succeed in the medical tourism industry. In addition, successful medical tourism destinations have highly trained medical professionals who can speak English, modern infrastructure and technology, accreditation of hospitals, an "exotic location," and policies which allow for the free movement of persons into the country for treatment (Sengupta, 2011; Bookman and Bookman,

2007). To succeed, countries equipped with these "ingredients" tend to go the route of price competition or specialization.

1.2. Benefits of Medical Tourism as a Niche Service Export Opportunity

Medical tourism is a form of alternative tourism with strong contrasts to traditional mass tourism. This form of tourism has many benefits over its traditional "sun, sea and sand" counterpart as it seeks to cater to a high revenue generating niche in the market while still preserving other aspects of the tourism industry. Niche tourism, including medical tourism, allows emphasis to be placed on the shaping of elements already existing in a destination to "tourists' needs and wants" (UNESCO-Nigeria Project for Revitalization of TVE in Nigeria). Medical Tourism can, therefore, be used to develop economies since it is a viable source of foreign exchange, a means to improve the health system, a job creator (from the medical staff to the hotel support staff), tourism and foreign direct investment (FDI) booster, and a means of increasing gross domestic product (GDP).

As a "mechanism for economic development," niche tourism offers the benefit of a more sustainable and less environmentally damaging form of tourism which is "more capable of delivering high-spending tourists" (Novelli, 2005, p. 1). This creates a more "elitist" form of tourism placing "niche tourists at a more cultivated, more refined and more selective pedestal above their mass contemporaries" (Nwafor, 2012, p. 600). This form of tourism contrasts with mass tourism which, when uncontrolled, "is no longer attractive as it offer[s] threats to destination development and environmental planning" (Ali-Knight, 2010). Niche tourism has the additional benefits of "diversifying the product, minimizing the effects of seasonality, and reducing pressure on "honey pot" areas by distributing tourists to lesser-visited places" (Caribbean Tourism Organization, 2008). The "honey pot destination" refers to the place that attracts many tourists, as is the case in mass tourism. "New" niche tourism ensures that "profitability no longer rests solely on economies of scale and the exploitation of mass undifferentiated markets" (Poon, 1989)[2]. This contrasts to mass tourism which depends on the flocking of large groups of tourists to areas of a country during a certain season.

Niche tourism provides a safety net against the negative effects of seasonality, which are evident mainly during off-peak seasons when resources are underutilized (Koenig-Lewis and Bischoff, 2005). De-

pendence on seasons for the majority of a country's tourism inflows also means that the tourism industry relies on a few weeks of intense inflows of income to survive for the rest of the year. This leads to low returns on capital, making it difficult for investors from the private sector to be attracted to invest in the tourism sector. Furthermore, mass tourism leads to shortages of resources, such as hotel rooms in the peak season, while the creation of excess capacity can leave room for higher depreciation costs during off-peak seasons. However, with niche tourism, a "less seasonal flow of tourism" is created, which helps to resolve the issues associated with seasonality (UNESCO-Nigeria Project for Revitalization of TVE in Nigeria).

Though medical tourism is a niche form of tourism, on a global level health tourism is experiencing growth rates of 20-30 percent per year (Bubna, 2013). Global revenues of approximately US$40 billion in 2010 and revenues of US$70 billion projected for 2013 evidence this global growth rate (Health Core, 2011). Estimates of the number of patients traveling to developing countries in 2010 also indicate the size of the industry, especially within Asia. Out of a total worldwide estimate of 3,954,000 to 6,994,000 medical travelers, Thailand received 920,000-1,200,000, India 150,000-400,000, Mexico 200,000-1,100,000, Malaysia 393,000, Brazil 180,000, and Turkey 110,000 (Patients Beyond Borders, 2012). In addition, Costa Rica received 30,000 medical travelers, Korea 81,000, and Taiwan 90,000. Overall, Freire (2012) estimates that medical tourism represents two percent of total global tourism and accounts for four percent of tourists' spend[3].

The growth of medical tourism has been facilitated by the liberalization of trade in goods and services "under the auspices of the World Trade Organization and its General Agreement on Trade in Services" (Smith, 2004; Smith et al., 2009b)[4]. In addition, the "increasing number of non-insured" persons within developed countries and the high costs of healthcare have continued to secure the medical tourism market as more persons opt for treatment in a foreign country (Bubna, 2013, p. 101).

The economic impact of tourism can also be analyzed using the multiplier effect in relation to medical tourism (Bubna, 2013). In general, as tourists spend their money, there are three levels of impact, namely "the direct, indirect and induced levels". The direct impact level (direct multiplier) referring to the amount spent by the tourist less the "value of imports necessary to supply the front-line service-providers".

Unless a country is self-sufficient and can provide the tourist with all he/she requires, this level of impact is smaller than the total amount of tourist expenditure due to leakage from purchasing imports. These front-line providers in turn must spend the money earned to purchase goods and services from local providers to continue their operations. This spending constitutes the indirect impact level (indirect multiplier) of tourist spending. At this level, more economic activity is stimulated than at the direct impact level. However, not all of the money spent contributes to the indirect multiplier since some is leaked during importation, paying taxes, and through saving. Lastly, part of the money spent at the direct and indirect levels will also be paid out as salaries, rent, interest and dividends. This increases economic activity even further through the induced multiplier as recipients of the money buy local goods and services.

In the World Travel and Tourism Council's report for 2011 a practical example of the multiplier effect was given. Here the direct contribution to GDP of travel and tourism was US$2 trillion and the creation of 98 million jobs. However, in terms of the direct, indirect and induced impact, Travel and Tourism resulted in "US$6.3 trillion in GDP, 255 million jobs, US$743 billion in investment and US$1.2 trillion in exports" (WTTC, 2012). This represented "9 percent of GDP, 1 in 12 jobs, 5 percent of investment and 5 percent of exports" (ibid). The multiplier effects described by Bubna are especially significant in medical tourism since, in his case study of India, the amount spent by a medical tourist was estimated to be twice the amount spent by a regular tourist. It was then calculated that the multiplier effect of a simple foreign tourist when compared to a medical tourist was 1:2.5 (Bubna, 2013, p. 109).

In addition to the benefits discussed above, engagement in medical tourism has an impact on the economic development of a country. Firstly, to facilitate competition in the medical tourism sector, countries must seek to implement or update their medical equipment and infrastructure, which adds benefit to the local health sector. Additionally, emphasis can be placed on improving the professionalism within the health sector. This would include more efficient use of the healthcare sector's human resources, the improvement of the quality of service within the sector, facilitation of increased salaries, higher quality training, and increased local medical research (Freire, 2012). Though funding for the development of infrastructure may initially come from the public or private sectors within the country, the revenue earned from

medical tourism can also be reinvested into the country's health sector. This would allow for the expansion of the healthcare sector to better cater for citizens of the country (Freire, 2012).

Secondly, medical tourism has the potential to attract medical professionals, who practice abroad, back to their home countries as new opportunities open up (Nwafor, 2012). In India, the improvement of hospitals and the increase in salaries are critical factors influencing this new trend, as doctors who had gone abroad to practice returned home (Connell, 2006). Also, a more efficient and up-to-date healthcare system will help to avoid "brain drain" as doctors will no longer need to emigrate to practice in a more "suitable" environment (Freire, 2012).

Thirdly, advantages can be gained through the channeling of development infrastructure for medical tourism toward a specific medical activity. Allowing the home country to reduce competition through specialization in a set of medical treatments brings even greater benefit.

Finally, it should also be noted that medical tourism at a basic level attracts foreigners. Due to the nature of the major reason for the trip, medical treatment, the medical tourist also often has a companion. These persons must at the very least spend on accommodation, food and transport. Furthermore, medical tourism is marketed in a way that invites the medical tourist to spend on leisure activities during recuperation. This provides benefits for the labor market of the home country, both within the medical and hospitality sectors. Hotels also benefit from medical tourism as persons stay on to recuperate after surgery (Nwafor, 2012).

1.3. Income Elasticity of Demand for Medical Tourism

Having noted some of the major benefits accrued to engagement in the medical tourism sector, an analysis can be done of the willingness of persons to spend on travel for medical purposes based on their income levels. Income elasticity of demand (YED) refers to the degree of responsiveness of demand for a good or service with respect to a percentage change in income. In this case, the service being demanded is medical care in a foreign country. Several factors play a part in the determination of whether a consumer will purchase this sort of service and the country from which they will purchase it. These include the price of the medical treatment, the presence of cheaper alternatives

Table 1: Income Elasticity of Demand for Medical Services

Researcher	Country being Studied	YED of Medical Services
Gerdtham et al (1992)	OECD Countries	1.33
Getzen and Poullier (1992)	OECD Countries	1.39
Leu (1986)	OECD Countries	1.18 to 1.36
Newhouse (1977)	OECD Countries	1.31
Kleiman (1974)	OECD Countries	1.22
Feldstein and Carr (1964)		1.00
		YED for Physician Services
Goldman and Grossman (1978)	United States of America	1.32 (pediatric visits)
Fuchs and Kramer (1973)	United States of America	0.57
Andersen and Benham (1970)		0.41
Silver (1970)	United States of America	0.85
		YED for Nursing Home Care
Lamberton,Ellingson and Spear (1986)	United States of America	1.07
Scanlon (1980)	United States of America	2.27
Chiswick (1976)		0.55 to 0.89
		YED for Dental Services
Feldstein (1973)		1.22
Andersen and Benham (1970)		1.24
Silver (1970)	United States of America	2.39 to 3.22

for the same treatment, and the consumer's level of income. The effect of the consumer's level of income on their demand has varying degrees of elasticity depending on the type of treatment required. Therefore, elective treatment such as rhinoplasty would have a more elastic YED than a life-saving treatment like heart surgery.

With the existence of full health insurance, the YED for medical treatment "should be small, if not zero" (Ringel et al, 2002, p.27) that is, highly inelastic. Therefore, a change in income should not have any effect on the demand for healthcare since it is covered by insurance. Values calculated for YED for medical treatment have therefore varied. Phelps and Mooney (1993) summarized YED estimates made by Keeler et al. (1988) for medical care, especially "hospital episodes," to be 0.1. The YED for healthcare was also calculated by Hsiao and Yip (2002)[5] using OECD data and was set at 0.8. However, Klöpping posits that travel and medical services have a "high income elasticity [of] demand" (Klöpping, 2012, p. 13) so that a change in income has a large effect on demand for these services. We can assume that this is in the case of a lack of universal health insurance in the home country since the absence of universal health insurance is one of the main reasons persons demand medical services abroad. Additionally, Shactman et al. (2003) state that, "in developed countries health care is a luxury good, and the long-term income elasticity of demand for health services is quite high". There are several available studies relating to the income elasticity of demand for medical care. The University of California, Berkeley, summarizes these studies relating to the YED for medical services, physician services, nursing home care, and dental services.

Since medical tourism comprises demand for both medical procedures and air travel, the income elasticity of demand for air travel will also be reviewed. In a 2007 InterVISTAS Consulting Inc. Report, it was estimated that income elasticities for air travel were "virtually" all above 1 and generally between +1 and +2. This shows that as an individual's income increases, there is generally a more than proportional increase in the air travel time he/she engages in. Within this report a literature review of income elasticity estimates for air travel was done. As summarized within the InterVISTAS Consulting Inc. Report (2007, pp.10-17), these were generally between +1 and +2, and included Taplin (1980) YED of 1.0 to 2.6, Abrahams (1983) YED of 0.46 to 1.6, Alperovich and Machnes (1994) YED of 1.64 to 2.06, Australian Bureau of Transport and Communications Economics (1995) YED of foreign lei-

sure air travel 1.88 to 5.51, Taplin (1997) YED of 1.1 to 2.1, Gillen, Morrison, Stewart (2002) YED of 1.39, and Njegovan (2006) YED of 1.5.

Noting well that both the YED for air travel and for medical care have been calculated to be greater than 1, we can conclude that the YED for medical tourism will also be greater than 1, that is an elastic YED.

2. Trends in Medical Tourism

The International Union of Travel Officials officially proclaimed health tourism as a "commercial activity" in 1973 (Bookman and Bookman, 2007). By 2006, the medical tourism aspect of health tourism had "captured the worldwide attention of governments, policy makers, academics, and the press" (ibid, p.1) and existed in approximately fifty countries around the globe in 2009. Growth has occurred especially in Asia where India, Singapore, and Thailand controlled over 89 percent of the market share in 2010 (Bharat Book Bureau, 2011). Various regions including Latin America, Europe, and Asia have also entered the medical tourism industry with varying levels of success.

Latin America's proximity to North America, the presence of bilingual doctors with U.S. training or board certification, and its exotic locations make the region a significant medical tourism destination (Inside Costa Rica). Several Latin American countries including Costa Rica, Colombia, Brazil, Mexico and Panama offer procedures including cosmetic surgery, orthopedics, ophthalmology, bariatric surgery, and dentistry. For this region, Brazil was the "first significant destination for cosmetic surgery outside of the USA" (Connell, 2011). Brazil, which has been ranked as the sixth most popular medical tourism destination (Bloomberg, 2013),[6] has developed infrastructure, advanced medicine, Joint Commission International (JCI) accreditation for 20 hospitals (ECLAC, 2010), and approximately 4,500 licensed cosmetic surgeons (Bloomberg, 2013). Costa Rica has also benefited strongly from medical tourism and the country has been described as the "Beverly Hills" of Central America. Mexico attracts more than one million medical tourists (Bloomberg, 2013), benefiting strongly from its proximity to the U.S. and significant reductions in the price of procedures in comparison to the United States. The country already boasts of 40 quality hospitals, eight of which are accredited by the JCI (Connell, 2011). Additionally,

between 400,000 and 800,000 Americans spend their retirement at Mexican healthcare and nursing facilities (KPMG International, 2011).

In Western Europe, movement for medical care within Europe became quite common in the 1980s with a south to north travel pattern developing. Again, low costs in certain European countries have been the driving force behind medical tourism in places such as Hungary and the Baltic states where costs are just 25–30 percent of those in the United Kingdom (Connell, 2011). Eastern Europe has also seen the advent of medical tourism sectors in Latvia, Lithuania, and Belarus. Latvia and Lithuania have sought to enter the industry based on cosmetic surgery and dentistry and have had many "diasporic returnees" (Connell, 2011). Latvia's cosmetic surgery sector branched out to foreign patients after the economic 'collapse' in the 2000s, which saw an accompanying decrease in local patients. It should be noted that certain European countries, like Latvia and Iceland in 2010, entered the medical tourism industry specifically as a revival measure after the economic collapse. In general, dental tourism has also soared in Europe with Poland, the Czech Republic, Ukraine, Slovakia, and Moldova recently entering the industry.

Asia is the leading medical tourism region in the world, with Thailand, India, Malaysia, and Singapore at the forefront of the industry. In 2011, India was second to Thailand, which "became known as a destination for medical tourism as early as the 1970s" (Connell, 2006, p. 1095). India has since slipped in terms of popularity as a medical tourism destination due to special visa requirements for medical tourists which forced "them to visit an immigration office," according to an August 14, 2013 article in *The Washington Post.* The major driver of medical tourism in India is "reproductive tourism," and Thailand has become popular for its provision of sex-change operations. Singapore's medical tourism industry differs from that of Thailand and India, as the country has achieved the status of a developed economy which to a large extent has removed the element of surrounding poverty from the tourist sector. It also has led to the increase in prices so that they are above that of Thailand and India, though they are still a fraction of the costs in the United States. Singapore has 15 JCI accredited hospitals and medical centers and specializes in joint replacements, liver transplants, neuro surgery, and cardiac surgery.

Table 2: Price Comparisons between the United States and Medical Tourism Destination Countries (US Dollars)

Procedure	United States Cost	Brazil	Costa Rica	India	Malaysia
Average Savings		30 to 45 Percent	40 to 65 Percent	65 to 90 Percent	65 to 80 Percent
Coronary artery bypass graft - CABG	$88,000	$35,000	$31,500	$9,500	$20,800
Valve replacement with bypass	$85,000	$33,000	$29,000	$8,500	$18,500
Hip replacement	$33,000	$15,000	$14,000	$8,000	$12,500
Knee replacement	$34,000	$12,000	$9,500	$1,500	$12,500
Spinal fusion	$41,000	$22,000	$17,000	$9,500	$17,900
IVF cycle, excluding medication	$15,000	$4,800	n.d.	$3,300	$7,200
Gastric bypass	$25,000	$12,000	$11,200	$6,800	$8,200
Facelift	$14,500	$5,200	$4,800	$3,500	$4,900
Rhinoplasty	$8,500	$2,600	$3,400	$2,800	$3,600

Table 2 (Continued): Price Comparisons between the United States and Medical Tourism Destination Countries (US Dollars)

Procedure	US Cost	Mexico	Singapore	South Korea	Taiwan	Thailand	Turkey
Average Savings		40 to 65 Percent	30 to 45 Percent	30 to 45 Percent	40 to 55 Percent	50 to 70 Percent	50 to 65 Percent
Coronary artery bypass graft - CABG	$88,000	$27,500	$22,500	$29,000	$21,000	$23,000	$20,500
Valve replacement with bypass	$85,000	$23,500	$29,500	$33,000	$18,000	$22,000	$20,000
Hip replacement	$33,000	$12,500	$20,700	$15,500	$10,500	$13,000	$11,800
Knee replacement	$34,000	$10,500	$18,500	$15,000	$12,000	$11,500	$12,000
Spinal fusion	$41,000	$16,200	$17,000	$18,000	$18,000	$16,000	$16,500
IVF cycle, excluding medication	$15,000	$4,600	$9,500	$7,500	$4,800	$6,500	$9,500
Gastric bypass	$25,000	$10,800	$14,000	$12,500	$13,000	$12,000	$13,000
Facelift	$14,500	$5,400	$7,000	$5,900	$5,600	$4,700	$4,800
Rhinoplasty	$8,500	$3,500	$4,800	$4,700	$3,500	$3,700	$3,300

The global growth of medical tourism described above has been accelerated by the long waiting periods for medical treatment in developed (home) countries, the competitive prices which are offered in destination countries (see Table 2), affordable air travel, and the lax regulations of certain developing, and developed, destination countries regarding unconventional procedures such as in vitro fertilization (IVF) and surrogate parenthood (as in India, Thailand and China) (Sengupta, 2011), and stem cell therapy (as in Singapore).

Accompanying the growth of the medical tourism industry are ethical issues which have arisen within the last two centuries. These issues surround the services offered as well as the existence of poor healthcare for locals alongside a booming medical tourism industry. On the one hand, the legalization of "assisted suicide" (euthanasia) in Belgium, The Netherlands, and Switzerland (Gray and Poland, 2008), sex change operations in Thailand, and the use of stem cells in therapy in Singapore have introduced ethical concerns. On the other hand, attraction of foreigners to countries such as India for "first world care at third world prices" occurs alongside deplorable healthcare for residents. Hence, in India, which is known for "reproductive tourism", only "17.3 percent of women have had any contact with a health worker" (Sengupta, 2011) and more than 120,000 women die annually during childbirth. The local population in Thailand also has to face the problem of a lack of medical physicians, averaging three physicians per 10,000 patients between 2000 and 2010 (WHO, 2011), who are unevenly distributed throughout the country patients between 2000 and 2010 (WHO, 2011), who are unevenly distributed throughout the country. This problem has been exacerbated by the influx of foreign patients without a supporting increase in physicians (NaRanong and NaRanong, 2011). This has also led to an increase in health-care prices and restriction of access to services for locals.

2.1. Why do Certain Countries exceed more than others in Medical Tourism?

In addition to the aforementioned factors including competitive pricing, the existence of human capital and developed physical infrastructure, cultural affinity, and distance, specialization and reputation have been cited as factors helping to determine the preference of one country over another as a medical tourism destination (Bookman and Bookman, 2007). Here cultural affinity includes return of Diaspora as

well as attraction of medical tourists to countries with past colonial ties. This cultural affinity can even be created as in the case of the Bumrungrad Hospital in Thailand, which houses a wing for Middle Easterners which includes 80 Arabic interpreters, three resident Arabic-speaking doctors, prayer rugs, and Halal meat, according to a February 8, 2012 article in *The New York Times.* Distance, though a consideration of those seeking medical treatment abroad, is not as important as other criteria since medical tourism in distant countries has increased over time. Other criteria include specialization, which also includes "the speed with which the procedure can be performed" (ibid, p.60), and reputation. Specialization also allows the country or hospital to create a monopoly and therefore determine their prices. Furthermore, those countries with weak currencies gain an advantage over those with stronger currencies, as the services provided become more price competitive.

2.2. Costa Rica – A Case Study

In 2011 the Council for the International Promotion of Costa Rica Medicine, (PROMED) estimated that 48,000 medical tourists entered Costa Rica, compared to the 36,000 who entered in 2010. By 2012, it was estimated that Costa Rica earned US$196 million from medical tourism, according to a February 18, 2013 article in *The Objective Standard*. Medical tourism in Costa Rica had modest beginnings in the 1980s as persons occasionally traveled to the country for cosmetic surgery. However, during the mid-1990s more persons were systematically attracted through the efforts of a group of Miami trained plastic surgeons, Drs. Arnoldo Fournier, Ernesto Martén, Ronald Pino, and Gabriel Alberto Peralta, with U.S. connections (Arce, 2009)[7]. The establishment of "Medical Tourism of Costa Rica" by Richard Feldman in 2005 and the "Council for the International Promotion of Costa Rica Medicine, PROMED" in 2008 further assisted this advancement of the medical tourism industry. Medical Tourism of Costa Rica, which serves approximately 15 patients a month, provides a source of reliable information for potential medical tourists concerning places to visit for medical treatment, prices and services offered. It assists with all aspects of medical travel as well as the provision of services within Costa Rica including car rental, sightseeing tours, restaurant reservations, and in-town transport (Patients Beyond Borders, 2011). The PROMED itself was es-

tablished to promote medical tourism in Costa Rica. Since its establishment, the non-profit organization has provided PROMED certification to several Costa Rican medical and dental establishments. The organization's main goal is to ensure that the quality of private medical service in Costa Rica is in keeping with its promotion internationally so that Costa Rica can become "a major destination for medical tourism" (PROMED). From April 24 to 26, 2013, PROMED also hosted the fourth International Medical Tourism Congress which brought 250 companies together from 15 nations. This congress served to firmly establish relationships among stakeholders, including insurance companies, medical facilities, medical tourism facilitators, and local hotels in the medical tourism industry (Costa Rica Medical Tourism, 2013). Through this conference PROMED aimed to also promote Costa Rica as an ideal retirement destination for those seeking a healthier life during retirement.

Costa Rica has two JCI accredited hospitals, Clinica Biblica and Centro Internacional de Medicina, as well as many smaller clinics. However, several note-worthy cosmetic surgeons operate within popular private hospitals since they do not have their own clinics (Patients Beyond Borders, 2013). Though initially focusing on cosmetic surgery, Costa Rica has delved into medical tourism in the form of dentistry with both the Meza Dental Care Clinic and the Nova Dental Center attracting 95 percent of their patients from North America. Costa Rica is ranked in the top five countries visited by medical tourists from the U.S. (Patients beyond Borders, 2013). Though the majority of medical tourists to Costa Rica originate from the U.S., Canada and the EU, Guatemala, Honduras, and Nicaragua also provide medical tourists. Overall, five percent of Costa Rica's international tourists come to the country for medical procedures, mainly cosmetic and dental care (Patients Beyond Borders, 2013). An additional advantage for Costa Rica is its ability to offer savings of "as much as 70 percent or more" (Inside Costa Rica) on medical procedures. Though certain physicians operate within private hospitals rather than within their own clinics, Costa Rica offers a unique resource in the form of "recovery retreats". These retreats, which are close to clinics, cater for transport to and from the airport and clinics, seek to serve recovering patients only and "are staffed with nurses and interns who attend to the special needs of recovering patients" (Inside Costa Rica).

From the discussion above, several strong points for the Costa Rican medical tourism industry can be seen. These include the estab-

lishment of organizations to promote the country as a medical tourism destination, create complete medical tourism packages, and scrutinize medical organizations. Additionally, the creation of recovery retreats has allowed the country to gain success in the industry.

3. Medical Tourism in the Caribbean

3.1. Establishing the Need for Diversification in the Caribbean

From the above analysis, medical tourism is a viable means through which economic growth, and ultimately economic development, can be achieved. For the Caribbean, this option can be used to improve the current economic situation in the region which is evidenced by slowing GDP growth and increased external debt. Noting that the CARICOM region's[8] main economic activity is within the services sector, with the exception of mineral producing and exporting countries, medical tourism provides a natural fit for the tourism dependent region.

From the GDP growth data shown for CARICOM countries in Table 3 below, over the 11-year period average GDP growth rates for most member states has been less than three percent. More specifically, three member states had an average GDP growth rate of <1 percent, eight member states had an average growth rate of between one percent and four percent, and two had an average GDP growth rate of > 4 percent. However, when the data is analyzed in two periods 2002-2007 and 2008-2012, it can clearly be seen that average GDP growth rate has slowed for all member states except for Guyana and Haiti. This slowing of GDP growth rates over the five-year period 2008-2012 resulted in a negative average GDP growth rate for eight of the member states.

Slowing growth has been experienced on a macro-level in the CARICOM as well as within the tourism sector. After the tourism sector's recessionary period of 2001-2002, the CARICOM region experienced an "upturn" with average growth in tourist arrivals at approximately 4.7 percent in the five years before 2008 (Thomas, 2010). However, growth slowed during the global financial crisis which affected North American and European countries comprising 90 percent of the CARICOM tourist market. Initially, growth came to a complete halt, and thereafter arrivals fell by an average of one-third of their previous levels in 2009 (Thomas, 2010).

Table 3: CARICOM GDP Growth Rate (Annual Percent) 2002-2012

CARICOM Member State	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Avg 2002-2012	Avg 2002-2007	Avg 2008-2012
Antigua and Barbuda	2.9	6.6	4.9	6.1	12.9	9.5	0.1	-12	-7.1	-2.8	2.3	2.13	7.15	-3.9
The Bahamas	2.7	-1.3	0.9	3.4	2.5	1.4	-2.3	-4.2	1	1.7	1.8	0.69	1.60	- 0.4
Barbados	-3.5	2	3.7	4	5.7	1.7	0.3	-4.1	0.2	0.6	0.2	0.98	2.27	-0.56
Belize	5.1	9.3	4.6	3	4.7	1.3	3.9	0.3	3.9	2.3	5.3	3.97	4.67	3.14
Dominica	-2.1	7.4	3	-0.8	9.5	6	7.8	-1.1	1.2	1	-1.5	2.76	3.83	1.48
Grenada	3.6	9.6	-1	13.5	-4.7	6.1	0.9	-6.7	-0.4	1	-0.8	1.92	4.52	-1,2
Guyana	1.1	-1	3.3	-2	5.1	-3.6	2	3.3	4.4	5.4	4.8	2.07	0.48	3.98
Haiti	-0.3	0.4	-3.5	1.8	2.3	3.3	0.8	2.9	-5.4	5.6	2.8	0.97	0.67	1.34
Jamaica	...	...	...	0.9	2.9	1.4	-0.8	-3.5	-1.5	1.3	-0.3	...	...	-0.96
Montserrat	n.d.*	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.			
St Lucia	0.1	4.4	8.4	-1.9	8.6	1.6	5.1	0.4	0.2	1.4	-3	2.30	3.53	0.82
St Kitts and Nevis	1.9	-1.4	4.4	9.9	5.8	2.8	4.6	-6	0.2	1.7	-1.1	2.07	3.90	-0.12
St Vincent and the Grenadines	6.3	7.6	4.2	2.5	7.6	3.3	1.6	-2.3	-3.4	-0.7	1.5	2.56	5.25	-0.66
Suriname	4.3	6	9.3	4.6	3.8	5.1	4.1	3	4.1	4.7	4.5	4.86	5.52	4.08
Trinidad and Tobago	8	14.4	7.9	5.8	13.7	4.8	3.4	-4.4	0.2	-2.6	1.2	4.76	9.10	-0.44

Source: World Bank Data (2013), UNECLAC (2013) and Authors' calculations
n.d.* - no data

Interest payments, especially for small island developing states, can seriously affect the potential for economic growth. For the CARICOM region, interest payments, as a percentage of current expenditure, averaged 15.31 percent in 1990 with the average value increasing to 17.06 percent in 2011. The 1990 average represented a range of countries' interest burdens from 4.91 percent in St. Vincent and the Grenadines to 39.17 percent in Jamaica, while that of 2011 represented a range of 3.19 percent to 28.96 percent for the countries. In 2000 the interest burden increased to 45.28 percent of current expenditure in Jamaica, the largest percentage for the period. For the observed period, Jamaica had the highest average value for interest payments as a percentage of current expenditure and with St. Vincent and the Grenadines having the lowest. Except for Trinidad and Tobago and Jamaica, to a small extent, interest payments as a percentage of current expenditure increased between 1990 and the latter years in every observed CARICOM state as seen in Table 4a. This analysis gives an indication of the increasing debt burden on CARICOM countries.

Interest as a percentage of revenue also gives an indication of this debt burden, with the average value for the CARICOM region being 15.02 percent in 1990 and 16.73 percent in 2011. St. Vincent and the Grenadines and Jamaica represented the extremes of this range with percentages of 4.07 percent and 35.16 percent, respectively, in 1990 and 9.40 percent and 31.05 percent for 2011. Similar to the former analysis, in every observed CARICOM state with the exception of Trinidad and Tobago and Jamaica, to a small extent, there was an increase in interest payments as a percentage of current revenue as seen in Table 4b. Large increases in interest payments as a percentage of current revenues were experienced by Jamaica, St. Kitts and Nevis, and St. Vincent and the Grenadines between 1990 and 2009 with percentage increases of 65 percent, 62 percent, and 43 percent, respectively.

This persistent indebtedness has plagued the region especially since its increase in the early 1990s into 2000s, whereby external debt increased from an average of 65 percent to 84 percent for the CARICOM between 1990 and 2005 (Caldentey, 2007). For the OECS, this increase in external debt was even more pronounced, moving from 75 percent to 105 percent over the period 2000 to 2005. These levels of indebtedness make "CARICOM economies ... among the most indebted emerging market economies in the world" (Caldentey, 2007).

Table 4: An Indication of Indebtedness - Interest Payments in CARICOM Countries, 1990-2011.

Table 4a: Interest Payments as a Percentage of Current Expenditures in CARICOM Member States, 1990-2011.

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011
Bahamas	11.75	13.63	11.13	10.85	9.83	10.09	10.64	10.85	12.78	13.80
Barbados	12.60	15.27	14.77	n.d.	n.d.	14.22	13.35	14.18	15.70	n.d.
Grenada	9.11	9.61	10.48	9.22	9.14	9.54	8.43	10.88	10.53	12.27
Jamaica	39.17	40.44	45.28	39.77	38.62	34.62	35.53	43.24	31.38	28.96
St Kitts/ Nevis	12.88	9.08	14.50	21.78	22.84	23.17	24.03	22.59	24.72	21.14
St Vincent and the Grenadines	4.91	6.91	10.41	11.11	12.13	11.83	10.98	10.86	10.61	9.13
Trinidad and Tobago	16.74	20.12	22.35	11.14	7.17	8.04	6.40	8.74	n.d.	n.d.

Source: *Economist Intelligence Unit; Country Reports (various years) and World Development Indicators Database (2013)*

Table 4 (Continued): An Indication of Indebtedness - Interest Payments in CARICOM Countries, 1990-2011.

Table 4b: Interest Payments as a Percentage of Current Revenues in CARICOM Member States, 1990-2011.										
	1990	**1995**	**2000**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
Bahamas	12.40	12.30	9.84	10.97	9.10	9.52	10.02	11.71	13.82	14.63
Barbados	13.92	16.28	13.04	n.d.	n.d.	15.35	15.06	17.00	20.27	n.d.
Grenada	9.53	8.75	7.20	5.34	5.92	7.36	6.76	10.51	9.24	10.62
Jamaica	35.16	33.37	45.99	39.10	38.54	35.84	38.68	53.97	34.79	31.50
St Kitts/ Nevis	12.55	9.29	16.75	20.56	21.06	21.28	22.56	20.39	23.32	17.51
St Vincent and the Grenadines	4.07	6.10	9.01	10.45	10.65	9.66	8.88	9.39	10.67	9.40
Trinidad and Tobago	17.53	18.65	20.77	8.23	6.09	6.47	5.03	8.41	n.d.	n.d.

Source: *Economist Intelligence Unit; Country Reports (various years) and World Development Indicators Database (2013).*

Considering decreasing economic growth and rising external debt, the Caribbean region can look toward increasing its revenues through diversification into medical tourism. This will help to increase tourist arrivals, which have been decreasing, as will be described below, as well as receipts from tourism. According to the Caribbean Tourism Organization (2011), worldwide stay-over arrivals have decreased over the last forty years with decreases in arrivals being more pronounced in the Caribbean. The Caribbean has experienced an average annual growth rate of less than two percent between 2005 and 2011, a significant lag Central America (five percent) and South America (six percent). The decreased growth has been significant in CARICOM countries, as opposed to non-CARICOM countries, with several CARICOM countries experiencing negative growth over the period 2005 to 2012 (Bourne, 2013). For the region, growth has only been experienced in "spurts" over the past forty years (CTO, 2011). Additionally, average spending per trip has decreased in recent years. For the region, over 50 percent of the Caribbean's tourist market still comes from the United States. However, arrivals from Canada have begun to increase although those from Europe, most significantly the UK, have begun to decrease. These trends ultimately indicate the decrease in arrivals for traditional tourism, leisure tourism, since the Caribbean region depends strongly on arrivals for this purpose of visit. However, the opportunity arises for focus to be placed on the introduction of alternative forms of tourism in the region. Medical tourism provides such an alternative, which will also facilitate the increase in average spending per trip as it is estimated that a medical tourist spends US$5,000.00 per trip according to Jamaican investment promotion agency JAMPRO as quoted in a March 22, 2013 article in CNN Travel. At the same time, this form of tourism will not detract from the already established leisure tourism since persons will be coming to the islands for treatment as well as recovery, during which time they can enjoy the sites offered by the various countries. Connell (2013) attributes five advantages to the Caribbean region that will aid in its entry into the medical tourism industry. These include the presence of an established tourist industry and the existence of tourist-oriented infrastructure that attracts tourists from major providers of medical tourists such as North America and Latin America. Other advantages include the use of English as the main language in the majority of islands, the presence of "relatively modern health care systems" on most islands, increasing diasporic tourism, and higher

travel costs to alternative medical tourism destinations including the Asian 'big four' — India, Singapore, Malaysia and Thailand (Connell, 2013, p. 117).

3.2. Existing Strengths in the Caribbean

The Caribbean region on a whole has several of the strengths discussed in the medical tourism literature which can facilitate the development of a thriving industry. In terms of the market for medical tourists, the Caribbean is close to major medical tourist "providers" and has access to "one of the largest diasporic communities in the world" relative to its size (Hosein, Franklin and Joseph, 2009, p. 6) with approximately six million persons from the Caribbean or of Caribbean heritage living abroad (Nurse, 2004). The Diaspora not only provides a market for medical tourists, but is also a source of medical expertise which can be brought to the Caribbean at reduced prices (Hosein, Franklin and Joseph, 2009, p. 13). Furthermore, residents in most Caribbean islands speak English, which is the language of the major tourist markets, while the Caribbean countries speaking Spanish already attract medical tourists from Latin America and Spain. The weaker currencies of the Caribbean alongside the lower prices for procedures to some extent allow for price competitiveness. Lastly, the existence of approximately sixty regional and offshore medical universities in the Caribbean creates an excellent resource for training of persons to staff the medical tourism drive.

3. 3. Obstacles to Overcome

"The Caribbean has found it more difficult to enter the medical tourism market since, despite its proximity to the United States, its prices cannot compete with those in Latin America" (Huff-Rousselle et al, 1995). This lack of price competitiveness with Latin America can be overcome, however, by placing more emphasis on specialization in areas aside from plastic surgery as well as through the offer of medical tourism packages. The more formidable obstacles to the formation of a medical tourism industry in the Caribbean come from the existent strain on the medical sector due to migration of doctors and nurses, poor infrastructure, and use of dated technology. These obstacles would have to be overcome before the health sector can seek to treat tourists, as in its current state a medical tourism sector in the Caribbean would cave

under the intense international competition as well as the "political discontent that might follow such an external orientation of health care" (Connell, 2011, p. 49) in the face of a challenged public health sector (Pan American Health Organization, 2007). Similar to other countries studied in this article, the Latin American and Caribbean region suffers from a lack of general practitioners in rural areas. As such, the region has diseases such as malaria, dengue and Tuberculosis (TB). Furthermore, lifestyle diseases such as diabetes and hypertension are becoming more prevalent in the region and adding an extra strain on the already burdened health system. The emigration of doctors and nurses from the Caribbean to the U.S., Canada, and the UK has created a vast shortage of medical workers, leaving public hospitals understaffed, and increasing the workload placed on the remnant. According to a PAHO report, 35 percent of nursing positions remain vacant in Caribbean and Latin American countries, while Jamaica "has to train five doctors in order to keep one" (Faini, 2002).

In the establishment of the medical tourism industry, the Caribbean should also avoid conforming to unethical practices such as the use of embryonic stem cells, allowing for assisted suicide, abortions, and carrying out of sex change operations. Regulations should be created to prevent the introduction of these practices in the region, and they should be openly stated.

3.4. Caribbean Case Studies and Lessons Learned

With the exception of the West, "one of the earliest places to develop medical tourism was Cuba" (Goodrich, 1993).[9] From the start, Cuba targeted the U.S. and Latin America to a large extent (ibid). The 1990s brought some success to this country with a large market for plastic surgery patients. The "Pre-Castro" era of Cuba also saw the targeting of American women who desired an abortion over a "Havana weekend" which included "airfare, medical care, and hotel accommodations" (Ramírez de Arellano and Seipp, 1983, p. 146) (Ramírez de Arellano, 2011). This was followed by the era of "sun and surgery" packages that included "dental, cardiac, organ transplant and cosmetic procedures" in conjunction with spa or "wellness adventures" (Smith, 2008, p. 2). Though there was success in the attraction of Americans in the 1990s, the political environment and challenges faced to enter Cuba from the U.S. created a challenge for the industry. However, patients

from the Caribbean and Latin America continued to enter for treatment so that it was estimated that 20,000 medical tourists came to the island in 2006 for joint replacement, eye surgery and addiction rehabilitation, among other medical procedures. More recently, medical tourism earns Cuba $40 million in revenue every year and is growing at a rate of 20 percent per year (KPMG International, 2011). Two "ingredients" have created the success of Cuba, according to Nagarajan (2004**).** The first of these was the promotion of private investment into healthcare to improve quality and promote specialization. This included the promotion of healthcare to "infrastructure status" in order to facilitate private investment by entrepreneurs and the use of human placenta in the treatment of skin disease, a practice which was banned elsewhere. The second of the two was the centralized promotion of medical tourism through the public company SERVIMED. This company created health packages that included travel on Cuba's airline and 24-hour assistance and companionship during the stay through cooperation with travel companies and tour operators (Nagarajan, 2004).

Expansion of the industry in Cuba has also been assisted by the increase in the awareness of Cuba's health facilities through the 2007 Michael Moore film *Sicko*, as well as through 'unofficially stated' political ties with Venezuela as evidenced by the presence of Venezuelan patients in the country. To add, Cuban doctors have also been sent to Venezuela to work in rural and urban areas. The intense focus on development of the health sector in Cuba after the Cuban revolution in 1959 has made it possible for medical professionals to be assigned outside the country to provide assistance after national disasters such as the earthquakes in Kashmir (2005) and Haiti (2010,) which brought further worldwide awareness of Cuban healthcare expertise (Ramírez de Arellano, 2011, p. 292). In addition, by 2006, it was estimated that 25,000 Cuban health workers were employed in sixty-eight countries around the world (Ramírez de Arellano, 2011). Cuba has the additional advantage of having "the largest number of doctors per capita" (KPMG International, 2011, p. 9). Specialization has also set Cuba apart as a unique procedure for "retinitis pigmentose" or night blindness is focused on in the Clinic Cira Garcia while the country also excels in treatment of skin diseases such as vitiligo.

Another successful regional medical tourism venture is the Barbados Fertility Center. Since 2002, Barbados has been involved in IVF with success rates above the U.S. and "up to twice the UK average," as

seen in the HFEA (Human Fertilization Embryology Authority) guide to infertility 2003-2004. Further evidence of these above average success rates can be found in the table below as BFC IVF success rates for 2010 are compared with UK 2010 averages for selected age groups:

Age Group	**UK IVF Average Success Rates (2010)**	**Barbados Fertility Center IVF Success Rates (2010**
< 35 years	32.2 Percent	52 Percent
35-37 years	27.7 Percent	45 Percent
>42 years	6.9 Percent	12 Percent

Source: Human Fertilization and Embryology Authority (HFEA) and Barbados Fertility Center (2013)

This service has been marketed internationally from the onset due to the small size of the local population. Some clear advantages for this sector include the availability of ova from persons of "similar ethnicity" to foreign patients of Caribbean heritage and shorter waiting times than that of the United Kingdom (Ramírez de Arellano, 2011, p. 294). The Barbados Fertility Center (BFC) was able to achieve a 72 percent clinical pregnancy rate for women less than 35 years in 2010. This center, which is JCI accredited, can charge an average price of US$5,750, which can be compared to the average cost of US$12,000 for an IVF cycle in the United States (Barbados Fertility Center, 2012). The BFC has focused on marketing of their product as well as the offering of package deals to potential customers. These package deals, called "IVF holidays," include testing, treatment, hotel accommodation, and transportation. Direct flights from the UK to Barbados also facilitate easy access to Barbados IVF for its target market. The BFC has a client base not only within Barbados, the Caribbean and the UK, but also in the U.S. and Canada (BFC, 2013). The BFC has promoted its services online using its website which advertises its package deals for persons traveling to Barbados for treatment, and the website also promotes BFC's success rates, treatment plans and customer testimonials. The BFC has also been promoted within the Patients Beyond Borders website, a recog-

nized promoter of medical tourism destinations and procedures. In 2011, it was estimated that 260 clients visited BFC (Connell, 2013). Approximately 80 percent of BFC's clientele originate outside of Barbados and with approximately 50 percent coming from the Caribbean region (ibid). The BFC also has clinics in Trinidad, the British Virgin Islands, and Antigua.

Lessons can also be learned from Jamaica's entry into the medical tourism industry as obstacles to be avoided are highlighted. Jamaica had entered the industry as a provider of plastic surgery in Montego Bay (Silvera, 2009), but this initiative later failed (Connell, 2013). Challenges for the Jamaican medical tourism industry stem from, "inadequately equipped public and private hospitals and the lack of trained professionals in the services that are in greatest demand, such as renal transplants and joint-replacement surgery" (Ramírez de Arellano, 2011, p. 293). This is a major challenge since the medical tourism industry will only be "accepted" and competitive "when the quality and range of services offered in public hospitals achieves internationally acceptable levels"[10]. Jamaica's entry into the medical tourism industry aside from the initiative in Montego Bay has tapped the Jamaican Diaspora residing in countries including the Cayman Islands, St. Lucia and the United States. Private medical practitioner Dr. Neville Graham estimated that 20 percent of his patients originate from outside of Jamaica, according to an April 22, 2012 article in *The Gleaner* (Jamaica). However, Jamaica has experienced the additional challenge of foreigners and the Diaspora coming to Jamaica and going to public healthcare providers for treatment, which are free of charge for Jamaican citizens. In order to benefit from the free service, local addresses are given when these persons visit the hospital and treatment is given, without the hospitals knowing that they are in fact living abroad. After the treatment, when the hospitals seek to provide follow-up care, it is realized that the persons are foreigners (ibid). In spite of these challenges, new frontiers of the medical tourism industry are being explored by Jamaica. According to a February 14, 2013 article in *The Gleaner* (Jamaica), a memorandum of understanding to facilitate the building of a "five-star" medical tourism facility worth US$170 million was signed by Jamaican investment promotion agency JAMPRO and American Global MD. Ultimately, this facility will house 200 beds and will specialize in cosmetic, dental, and bariatric services. With a Diaspora of approximately 4.5 million persons

of Jamaican origin, it is advised that Jamaica target its Diaspora for medical tourism (International Medical Travel Journal, 2013).

From the case studies, successful medical tourism ventures in the Caribbean focus on specialization of services offered, international marketing of services including the offering of package deals, price competition particularly with the U.S., and good reputations for medical services offered. Conversely, unsuccessful ventures in the region have suffered from diasporic "abuse" of the system and attempts to cater to foreigners without first raising the standards of local medical services.

4. Policy Recommendations

4.1. Development facilitated by Medical Tourism

Medical tourism is an alternative means of development for Caribbean states, especially those with thriving tourist industries. Since the medical tourism industry is growing at a rapid pace and it has been identified that the Caribbean region is facing some challenges in competing on price with Latin America, Caribbean countries should cautiously consider specific strategic options when attempting to enter the industry. This could be in the form of specialization in services that are becoming increasingly desired by persons in proximate medical tourism markets but which are not yet fully exploited by existent medical tourism destinations. Caribbean countries can seek to continue to focus on fertility treatment and cardiac surgery while also catering to "victims" of the obesity epidemic in the United States. With obesity being prevalent in more than 20 percent of the population of every state in the U.S. in 2010, (Center for Disease Control and Prevention, 2013) surgical procedures to reduce weight should be offered in the Caribbean. These should include bariatric surgery, liposuction, and tummy tucks.

In addition to revenue which can be earned from medical tourism, entry into this industry would facilitate job creation not only for medical professionals, but also for persons involved in regional airline transport, hospitality, tours, and land transport. Through this, the region stands a good chance of attracting medical professionals who may have moved abroad as well as stemming the future "brain drain" of emerging medical practitioners.

4.2. Integration through Medical Tourism

Integration of the Caribbean region for the promotion of medical tourism should primarily be in the form of cooperation to share resources. As such capital from countries can be invested in specific medical tourism industries to facilitate expansion through development and marketing. This should also include investment from the Caribbean Diaspora (Hosein, Franklin and Joseph, 2009). Countries with medical universities could offer scholarships for Caribbean citizens wishing to pursue medical degrees, on the condition that they remain in the Caribbean for a certain period to practice. Integration could also be a form of protection, as countries offering the same product would not be allowed to compete with one another in terms of price or services offered. This would avoid competition for the same market. Free movement of labor within the Caribbean would also allow doctors interested in specific fields to travel to whichever country offers the particular service rather than trying to duplicate a similar product in their home country.

More specifically, relative to the division of labor, countries can share the load of more intense medical procedures including extensive testing before diagnosis and treatment. By way of simple illustration, a medical tourist in Grenada could have his/her X-rays and blood work sent to Guyana to be examined, the results scanned and sent to trained specialists in Jamaica for analysis, and a complete diagnosis sent back to Grenada in the hands of the top Caribbean surgeon in that field. The marketing load could also be shared, as a Caribbean Medical Tourism Promotion Board can be established which will comprise of members from different Caribbean states who are skilled in strategic marketing and product placement. The committee can be mandated to create policies for the marketing of Caribbean medical tourism institutions as well as the maintenance of partnerships among the regions' health and government sectors. Skilled programmers, website designers, visual artists and marketers from the Caribbean could also be employed in the promotion of the industry. This could also include trips to target markets to promote the product and create valuable connections.

Since medical tourism "stands on two legs," medicine and tourism, integration should also occur in the form of human and capital investment in Caribbean owned hotels, airlines, catering businesses, and tour companies. Persons who are skilled in these industries should

therefore be able to easily share their expertise for the development of a regional tourism industry which would go hand in hand with the medical services being offered. This would allow for the creation of "first world" quality medical tourism packages at affordable prices. The creation of medical tourism packages including deals on airfare, hotel accommodation, and land transport could also create an avenue for non-price competition with Latin America.

5. What needs to be Established?

5.1. Resources needed to get this Strategy off the Ground

Like Thailand, India, and Malaysia, Caribbean economies can seek to develop themselves through the development of their health sectors and eventual export of services offered. This would occur after serious reconstruction of health sectors which have failed to care adequately for local populations, as evidenced by the prevalence of diseases such as TB, malaria and dengue in the region (PAHO, 2007). This can partially be accredited to a lack of staff and use of outdated medical equipments in parts of the region. As seen from the three case studies undertaken, government support is mandatory for the establishment of a successful medical tourism sector. This support should not just include funding, but also establishing committees with the sole purpose of creating and implementing strategic medical tourism plans for development and promotion of the sector. As such, the first step to the formation of a thriving medical tourism industry should be improvement of the local public health systems within the region. Once this has reached world benchmarks, the countries should seek to continue development of medical services for export. This would involve the creation of luxury, "first world standard" healthcare facilities in Caribbean states which must be adequately staffed and accredited by internationally recognized hospital accreditation boards like the Joint Commission International. A regional forum[11] for the purchase of shares in various Caribbean medical tourism institutions should also be established to facilitate funding of the development, alongside government funding. As mentioned previously, a regional committee for the creation and implementation of medical tourism plans should be established. This committee should also oversee marketing in target markets and the creation of re-

gional medical tourism pricing schemes. Prices should also be standardized within the region to avoid intra-regional price competition.

6. Conclusion

This study has shown that there is scope for development and regional integration based on a medical tourism cluster in the Caribbean region. Studies of medical tourism industries throughout the world have revealed that there is earning potential in the industry. The success stories of Cuba, Barbados, and Costa Rica in the industry also highlight the benefits to be gained from entry, as well as the means by which the respective sectors can flourish. This is based heavily on strategic marketing alongside government support. Barbados and Cuba show the potential of the Caribbean region to prosper in medical tourism once the industry is entered strategically. This could include specialization in services desired by proximate medical tourist markets. The Caribbean region is poised for cross border marketing since it is close to potential medical tourist markets of the U.S., Canada and the United Kingdom. This would allow persons to market the Caribbean medical tourism product within target countries through road shows or conventions. Furthermore, the Caribbean can seek to integrate through the formation of a medical tourism cluster. This integration, based on Adam Smith's theory of the division of labor, could allow for specialization of Caribbean countries in medicine, or a related medical tourism field (such as marketing), which can be joined to that of other Caribbean countries to produce an attractive medical tourism package. Entry into this industry can therefore facilitate development through the improvement of the health sector, increase in GDP, and employment generation. However, in order to facilitate entry into the medical tourism industry, Caribbean public health systems have to be improved and brought up to "first world standards".

ENDNOTES

1. For this article, the Caribbean will be defined according to its demarcation by the Pan American Health Organization (PAHO) in its Index of Countries. This would include the Latin and Non-Latin Caribbean with the inclusion of Belize from the Central American Isthmus and the exclusion of Puerto Rico from the Latin Caribbean. PAHO list of Caribbean countries accessed at: http://new.paho.org/hq/index.php?option=com_content&task=blogcategory&id=24 71&Itemid=2408

2. As quoted in *Long Tail Tourism: New Geographies for Marketing Niche Tourism Products* (Lew, 2008, p. 412).

3. Freire (2012) used De Greef & Thomaes' 2006 approximation of the number of medical travelers per year in comparison to the 2009 and 2011 OMT/UNWTO's estimation of the total number of tourists.

4. As quoted in *Medical Tourism: Treatments, Markets and Health System Implications: A Scoping Review* (Lunt et al., 2011, p. 6).

5. As quoted in, *Does universal health insurance make health care unaffordable? Lessons from Taiwan* (Jui-Fen Rachel Lu and William C. Hsiao 2003)

6. Accessed August 14, 2013 from http://www.bloomberg.com/slideshow/2013-06-25/top-travel-destinations-for-medical-tourism.html#slide4

7. As quoted in *Do You Know the Way to San José? Medical Tourism in Costa Rica* (Warf, 2010, p. 54).

8. Member states of the CARICOM: Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, St Lucia, St Kitts and Nevis, St Vincent and the Grenadines, Suriname and Trinidad and Tobago. CARICOM Associate Members: Anguilla, Bermuda, British Virgin Islands, Cayman Islands and Turks and Caicos Islands.

9. As quoted in *Medical Tourism* (Connell, 2011).

10. East (2009) as quoted in *Medical Tourism in the Caribbean Islands: A Cure for Economies in Crisis?* (Connell, 2013, p.118).

11. Lloyd Ince, interview by author, Port of Spain, March 30, 2012.

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