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An Approach to Medical Tourism on Mexico's Northern Border

Tomás Cuevas Contreras*

Abstract

This article discusses the opportunities to develop the northern region of Mexico as a medical destination. Global competitiveness is emerging in health care while advances in science and technology allow almost any patient to travel abroad for treatment. Today, more and more individuals from developed countries, with the financial capacity to cover all expenses, consider overseas travel to developing countries for health care. The aim of this study is to examine what kind of medical services and entertainment encourage visitors to select a particular medical destination.

Introduction

Today, "tourism on its present international scale could not occur without the existence of a large and sophisticated 'industry' which enables people to be tourists."[1] For the medical tourist experience, the majority of people also require accommodation, transportation, entertainment, and other essential support.

Furthermore, the advancement of air transport facilitates travel to distant destinations.[2] In terms of international travel history, medical tourism can be traced back to a time when one considers outbound travel from developing countries, as well as the long history of travel to spas and other historic health and well-being destinations in Europe and Asia.[3]

Therefore, private provision and individual demand for health care, which is stimulated by an increased ability and willingness of the consumer to travel, underpin medical tourism. Indeed, the key debate about the rise of medical tourism concerns commercialization and competition.[4] Medical tourism has emerged from the rapid growth of what has become an industry, where people travel substantial distances to overseas countries to obtain medical, dental and surgical care, while

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[1] Richard Sharpley, *Tourism, Tourists, and Society* (Huntingdon: Elm Publications, 1999): 30.

[2] Beth Kangas, "Traveling for Medical Care in a Global World," *Medical Anthropology* 29: 4 (2010): 344–362.

[3] Ji Yuu. Yu and Tae Gyou. Ko, "A Cross-cultural Study of Perceptions of Medical Tourism among Chinese, Japanese and Korean Tourists in Korea," *Tourism Management* 33 (2012): 81.

[4] Neil Lunt and Percivil Carrera, "Medical Tourism: Assessing the Evidence on Treatment Abroad," *Maturitas* 66 (2010): 30.

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simultaneously being holiday-markers in a more conventional sense.[5]

At present, health travelers are often met at their destination airport arrival gate and whisked to an American-style hospital or hotel. From that point, they are usually under someone´s care in a treatment center, getting a bite at a restaurant or resting in a cozy hotel room.[6]

Medical Tourism in Mexico and the Northern Border

Global competition is emerging in health care. Traditionally, patients in developing countries traveled to developed countries for quality health care. An increasing number of patients from developed countries have made the decision to receive medical services in developing countries.

Mexico has traditionally been a popular site for patients seeking primary and dental care. For high-level surgical services and more sophisticated health care, it requires hospitals and clinics with the highest level of services and amenities that American patients expect. Mexican export of health services in 2013 represents $4.1 billion (Figure 1). It ranks 23rd in foreign exchange earnings[7] while tourism accounts for about 9% of GDP. Tourism is the third largest source of foreign exchange earnings after oil and remittances.[8]

Clearly, Mexico is the second most preferable destination as medical tourism destination, attracting over one million foreign patients annually from the United States; many of these medical tourists are of Hispanic origin, mostly from the states of California, Arizona and Texas.[9] For example, these tourists seek professional medical staff in private facilities, clean and modern and hope to have the high-tech equipment that is available at U.S. hospitals.

New patients have noticed this trend in medical tourism. They seek quality medical care at affordable prices. The city of Chihuahua is defined as a medical tourism destination, “a term used to describe the practice of traveling to another city or country to obtain professional medical care.”[10] Although publicly insured medical tourism is in its very early stages in the United States, Europe has had more than three decades of experience with patients traveling from one EU Member State to other countries for health care.[11]

In the southern United States, there has been a shortage of doctors and nurses in proportion

[5] John Connell, “Medical Tourism: The Newest of Niches,” *Tourism Recreation Research* 31:1 (2005): 99.

[6] Josef Woodman, *Patients Beyond Borders. The Most Trusted Resource in Medical Travel* (USA: Healthy Travel Media, 2015), 22.

[7] SIIMT. Inteligencia de Mercados Sector Turístico en México (2015). Accessed March 15, 2015: http://www.siimt.com/en/siimt/siim_ocupacion_hotelera

[8] US-Mexico Chamber of Commerce, 2011. Reporte 3: Desarrollo de Turismo, Turismo Médico y Turismo Seguro en México (2011), 3. Accessed November 3, 2015: http://www.usmcoc.org/papers-current/3-Desarrollo-del-Turismo-Turismo-Medico-y-Turismo-seguro-y-protegido-en-Mexico.pdf

[9] PROMÉXICO. *Turismo de Salud. México*: Secretaria de Turismo, Salud, Secretaría de Economía (2014).

[10] Moisés Jiménez Hernández, El Proyecto de Plan Municipal de Desarrollo 2010–2013. Comisión de Planeación. Chihuahua. Ayuntamiento 2010–2013. Mimeo 16/02/2011. Universidad Autónoma de Ciudad Juárez, Ciudad Juárez, México.

[11] Glenn Cohen, *Patients with Passports: Medical Tourism, Law, and Ethics* (Oxford: Oxford University Press, 2015), 205.

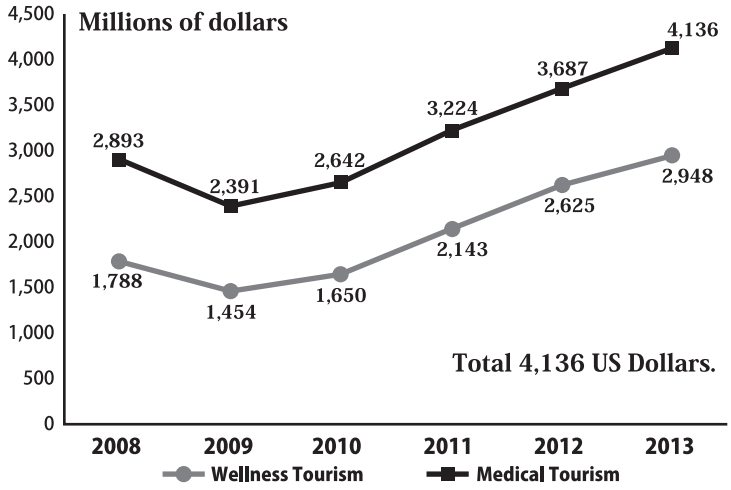


Figure 1: Mexican Exports of Health Services 2008-2013

Source: Author's rendering, based on statistics from Promexico (2014).

to the population. There is an opportunity to develop the northern region of Mexico as a medical destination par excellence. This requires showing the unique competitive advantage of the high-level medical services that cost significantly less compared with standard costs in the United States and elsewhere. It is an opportunity for greater investment in medical infrastructure in the border and the construction of new hospitals, which would attract experts in various specialties. Additionally, it can attract more foreign patients and receive greater economic benefits:

> The 2010 U.S. Census projects the numbers of retired Americans will increase by 40 million to nearly 90 million by 2050. Currently, 5 million American retirees living outside the U.S., of which 2.2 million are mainly in Western hemisphere in Mexico, Dominican Republic and Brazil. Another 1.5 million live in Europe and 850,000 live in Asia.[12]

Also, approximately 33 million people in the United States have no health insurance. It is very attractive to the American retirees residing in Mexico (about 800,000), and Medicare insurance does not cover all medical expenses for those living outside the United States. Perhaps the greatest risk for residents of destination countries is that increased volumes of international patients will have adverse effects upon local patients, heath care facilities and economy (Figure 2). Mexico, India, Thailand, Singapore, Costa Rica, Korea, and South Africa, amongst others, are making significant investments to become regional "bio-medical hubs." However, there will presumably be winners and

[12] U.S.-México Chamber of Commerce. Reporte 3: Desarrollo de Turismo, Turismo Médico y Turismo Seguro en México (2011) 3. Accessed November 3, 2015: http://www.usmcoc.org/papers-current/3-Desarrollo-del-Turismo-Turismo-Medico-y-Turismo-seguro-y-protegido-en-Mexico.pdf

losers in the struggle for the market share of international patients.[13]

However, several issues must be considered: licensing standards; differences in standards of health care; different medical protocols; protectionism of territorial language barriers; prejudicial image and safety certification by the Hospital Joint Commission or their counterparts in Mexico.[14] The cities that are on the border are on the periphery of their countries. The environment is more interdependent. It is not only economic, but social and political. So there is the so-called buffer zone by the Convention for Cooperation on the Protection and Improvement of the Environment in the Border Area, which was signed in 1983 in the city of La Paz, Baja California. This began the process of cooperation between Mexico and the United States, however:

> In the North American region, the issue of cross-border institutionalization continues to be studied by various authors but it is generally agreed that cross-border institutionalization is limited in part by the fact that the legal framework that the American and the Mexican constitutions provide is relatively narrow and inflexible, even if the Canadian Constitution is considerably more flexible.[15]

Health is an important element to be taken into account when planning for cross-border tourism. Infrastructure and health services are to be integrated with constant attention to the traveler.[16] The concept is based on tourism recreation and leisure spas. Among establishments offering such services are health spas, meditation centers, hospitals, etc. This is in order to improve well-being and the health of individuals. Nevertheless, several tourism initiatives are not involved in networks or collaborative formations.

Consequently, opportunities for collaboration on health tourism providers on common-borders are paradigmatic: countries that share common-borders may collaborate in providing cross-national public funding for health care from providers across borders: "The strategy of intercomprehension is especially fruitful in the case of geographical areas, in which we can find different languages […]."[17] The language of tourism underscores the tautological importance of language in interpreting tourist places. Here, a language of fact and another of conjecture are used to describe two different histories. Language and discourse inform and help shape tourism in several ways; they establish the means and patterns of communication between the various actors of tourism activities.[18] In the case of the Ciudad Juárez-El Paso region, Zizaldra argues about:

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[13] Leigh Turner, "First World Health Care at Third World Prices: Globalization, Bioethics and Medical Tourism," *BioSocienties* 2 (2007): 320.

[14] José Reyes and Kevin Flores, *Turismo de Salud en la Frontera.*

[15] Tony Payan, "Theory-Building in Border Studies: The View from North America" *Eurasia Border Review* 5: 1 (2014): 13.

[16] Manuel Ruíz de Chávez, Ricardo Jiménez Aguado, Mario Márquez Laposse and George A. O. Alleyne, "Salud y Turismo" *Salud Publica de México* 36:1 (1994): 62.

[17] Luis Filipe Barbeiro, "Intercomprehension in Primary School: Discovering Languages and Construction Knowledge," *Language and Intercultural Communication* 9: 4 (2009): 220.

[18] Erve Chambers, *Native Tours: The Anthropology of Travel and Tourism* (Waveland Press, Inc., 2010): 106–107.

[...] the urgent need to understand the "features of a cross-border network" to secure transactions within the context of reciprocity and interdependence socioeconomic relations. From the conception of demanding border cities, driven by historical and cultural ties with a potential for tourism development territory.[19]

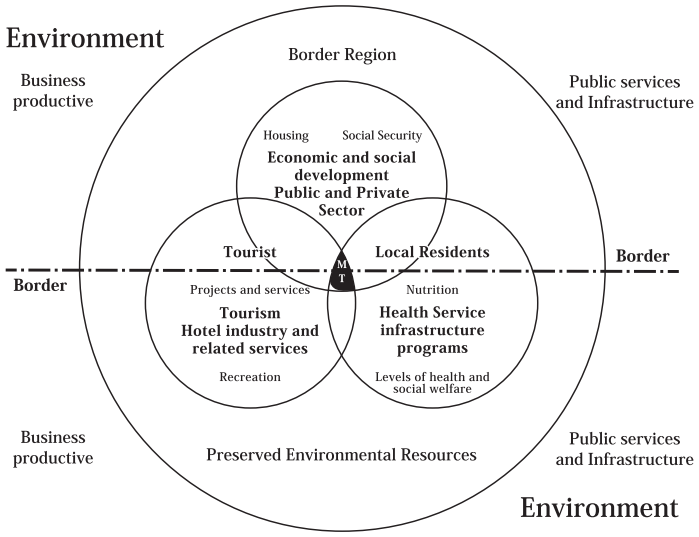


Figure 2: Relationship between Tourism, Health and Development

Source: Author´s rendering based on Ruiz de Chávez et al*
* Manuel Ruiz de Chávez; Ricardo Jiménez Aguado; Mario Márquez Laposse, and George A. O. Alleyne "Salud y Turismo" 61–69.

Border Healthcare Services Development

The inadequate supply of health services in the United States is one of the factors favoring the growth of the medical tourism phenomenon by allowing other developments in marketing and business competition for medical services at the border. "How to develop a service strategy and cooperation focused on a health system […] could mean further economic development of the region, based on the provision of medical services [which is] first class [and] low cost to attract foreign patients."[20] However, "Perhaps the most common relationship, but the least understood, between borders and tourism is that of boundaries as lines of transit."[21]

The hospital structure in Mexico is especially designed to fulfill the functions of prevention, diagnosis and treatment of diseases. They are classified into three levels: first level hospitals, which focus on health promotion and prevention, early diagnosis and treatment of health.

Secondary hospitals work at the diagnosis of diseases of the four main medical area

[19] Isabel Zizaldra Hernández, "Red Transfronteriza en Turismo: Una Exploración en Ciudad Juárez, Chihuahua, México y El Paso, Texas, Estados Unidos," *Teoría y Praxis* 8 (2010): 151–152.
[20] Reyes and Flores, *Turismo de Salud en la Frontera.*
[21] Dallen J. Timothy, *Tourism and Political Boundaries* (Taylor and Francis Group, 2001): 107.

specialties: surgery, pediatrics, gynecology and internal medicine. These hospitals are equipped with x-ray services, as well as outpatient services.

Tertiary hospitals, include specialists working for the care of complex pathological problems that need specialized equipment and facilities in their respective medical field. These standards apply to the public and private sectors. However, as mentioned, there are some concerns over degree standards; differences in health care standards; differences in medical protocols; territorial protectionism; language barriers; prejudicial images, safety and Hospital Certification by Joint Commission or their counterparts in Mexico.

Medical Tourism and Healthcare

Medical tourism should not only be approached from the perspective of costs but comprehensive service, while the fact that quality is an element but not the ultimate goal should also be considered. While the high cost of medical services continues to rise due to the lack of an integrated healthcare system in developed countries, including the emergence growth in developing countries in health tourism, it is also necessary to recognize that developing countries have taken the opportunity to continue serving people seeking medical treatment.

Carruth and Carruth indicate that U.S. spending on healthcare is 4.3 times national defense. Moreover, it has the highest Organization for Economic Co-operation and Development (OECD) per capita spending on healthcare.[22] In addition, the latest phase of international medical travel involves journeys in search of inexpensive medical care. The numbers are contestable; health-related agencies and trade organizations in the United States, Canada, the United Kingdom and other nations do not track the number of their citizens obtaining healthcare in other nations.[23]

Elsewhere, drivers of medical tourism include the high costs of treatment at home, how promptly is the treatment obtained and treatments not available (or illegal) within home countries. The desire for privacy and the wish to combine traditional tourist attractions, hotels, climate, food, cultural visits with medical procedures are also thought to be key contributing factors.[24]

When participation intent by groups is analyzed, the cost-effectiveness group was sensitive to stay and cost factors, and possessed a dividend, contrasting demand for both significant treatment, and aesthetic and healthcare services.[25] Some important trends guarantee that the market for medical tourism will continue to expand in the years ahead. By 2015, the health of the vast Baby Boom generation will have begun its slow, final decline. There are 70 million boomers in the United States and over 150 million in all when Canada, Europe, Australia, and New Zealand are taken into account.

[22] Paul Carruth and Ann Carruth, "The Financial and Cost Accounting Implications of Medical Tourism," *The International Business and Economics Research Journal* (2010): 135–140.
[23] Turner, "First World Health Care at Third World Prices."
[24] Neil Lunt and Percivil Carrera, "Medical Tourism," 30.
[25] Yu and Ko, "A Cross-cultural Study of Perceptions," 87.

They represent an overwhelming market for inexpensive, high quality medical care.[26]

The impact of tourism on those people varies widely, in respect to the number and particular interests of tourists, the cultural background and hospitality experiences of the indigenous communities, and the largest social and political contexts of which the indigenous communities are a part of.[27]

Some considerations are technological innovation and the increasing levels of income and leisure time that has provided the means for more widespread participation in travel and tourism, which changes in the social condition.[28] Consequently, medical tourism is growing and diversifying. Estimates vary, but worldwide revenue was about $60 billion in 2006; McKinsey projects that this had increased to $100 billion by 2012.[29] Meanwhile, Willis and Coustasse indicate that, "[…] medical tourism develops into a multi-billion dollar industry, with steady annual growth projected, estimates of global economic gains vary between $40 and $100 billion for destination countries."[30]

A by-product of globalization (the increasing economic integration and interdependence of nation states and regions) is the rapidly growing international market in healthcare services, products and consumers. Stronger interconnections between states have facilitated the free exchange of people and products, yet, at the same time, the increase of cross-border movement presents new challenges for the governance and regulation of patient care.[31]

Likewise, hospital executives in other countries drew many lessons from the profits generated by international patient centers at U.S. hospitals. They learned that "concierge medical services" generate business by offering high levels of customer services and blurring the line between hospitals and hotels. They also recognized that international clients can be charged far more than local patients as long as the international customers are offered prices substantially lower than what they would pay at home or receive care that they cannot obtain in their counties of origins. Thorough physical, comprehensive diagnostic tests, attentive patient care, luxurious rooms, outdoor pools, room service, and private limousine services can all be used to attract "upscale" customers.[32]

Even though "medical tourism" is widely used in popular news media reports, critics of the term argue that the phrase risks trivializing the experiences of travel in search of affordable healthcare. "Sun, sand, and surgery 'remains a slogan used by some brokerages.'"[33] However, long treatment delays and rationing decisions that block access to particular drugs, medical devices, and prompt

[26] Marvin Cetron and Frederick J. DeMicco, "Club Medic," *FIU Hospitality and Tourism Review* 24: 2 (2006): 16.
[27] Chambers, *Native Tours,* 82.
[28] Sharpley, *Tourism, Tourists, and Society*, 35.
[29] Kumar, "Designing Promotional Strategies," 87.
[30] William K. Willis and Alberto Coustasse, "Medical Tourism: Comparing Coronary Bypass Surgery in the U.S. and abroad." Published in Proceedings of the Business and Health Administration Association Annual Conference 2014, Chicago, IL., 209
[31] Lunt and Carrera, "Medical Tourism," 27.
[32] Turner, "First World Health Care at Third World Prices," 307.
[33] Ibid, 308.

medical procedures motivates patients to travel for healthcare.[34]

Furthermore, the high costs of treatment combined with long waiting times, affordability of airfares to overseas destinations, favorable exchange rates, and general economic wealth of baby boomers contributed to this phenomenon.[35] Medical tourism is mainly from developed countries where the cost of medical care may be very high, but where ability to pay for alternatives is also high. Most are from North America, Western Europe and the Middle East. Many are part of the Indian diaspora in the United States, Britain and elsewhere, and generally from elites, including several African countries.[36]

Opportunities for Wellness Destination

Tourism development in many countries has benefitted from international structural funding.[37] In addition to air travel, a number of other factors contribute to this growth. Hotels evolved and became international in focus, developing global networks to serve travelers. The globalization of tourism is the outcome of the same political and economic factors that can be identified in other industries.[38]

Medical tourism has emerged from the broader notion of health tourism. Some researchers have considered health and medical tourism as a combined phenomenon but with different emphases.[39] Until recently, discussion of medical tourism was restricted to limit it as a form of "health tourism" or a subset of that:[40]

> Medical tourism has grown in a number of countries, such as India, Singapore and Thailand, many of which have deliberately linked medical care to tourism, […]. But medical tourism has also developed in South Africa and in countries not hitherto associated with significant levels of Western tourism such a Belarus, Lithuania and Costa Rica. Eastern European countries have become important for dental care and plastic surgery. Jordan serves patients from some parts of the Middle East while Israel caters both to Jewish patients and some from countries nearby through specializing in female infertility, in-vitro fertilization and high-risk pregnancies.[41]

Over 33 million uninsured individuals live in the Unites States. But access to health care is not just a problem for the uninsured. High premiums for health insurance mean that millions of Americans are consigned to purchase low-budget plans that provide coverage for only a small

[34] Ibid, 322
[35] Yu and Ko, "A Cross-cultural Study of Perceptions," 81.
[36] Connell, "Medical Tourism," 100.
[37] Sharpley, *Tourism, Tourists, and Society*, 164.
[38] Costas Spirou, *Urban Tourism and Urban Change Cities in Global Economy* (New York: Routledge, 2011), 39.
[39] Lunt and Carrera, "Medical Tourism," 28.
[40] Yu and Ko, "A Cross-cultural Study of Perceptions," 81.
[41] Connell, "Medical Tourism," 99.

"basket" of healthcare services.[42] For instance, Texas is one of the most expensive in terms of medical expenses. For a large percentage of the population, it is impossible to obtain quality health care at an affordable price. In the case of México, there are only eight Joint Commission International (JCI) accredited hospitals:

> […] most of which are located in the northern states. These hospitals, as non-accredited institutions and clinics, give service to more than a million American citizens, who cross into Mexico for dental procedures and even heart surgery. As before, most of these were recent immigrants to the USA and Mexican Americans; with the economic crisis, more and more people cross the border for these services.[43]

For North Americans who are unable to obtain timely access to care or are lacking adequate health insurance, they use brokerages and the Internet to seek out what they hope will be low-price, high-quality health care. Although business leaders, health care professionals, and government representatives in such countries as Singapore, Thailand and India want to attract customers from Europe and North America, the largest and most profitable sources of medical travelers are likely to be much closer to home.[44]

In terms of types of health care, high-quality services on plastic surgery are popular among clients. The majority of overseas patients visit for: i) blepharoplasty, a procedure to remove unwanted fat, usually along with excess skin and muscle from the upper and lower eyelids; ii) liposuction, a surgical procedure intended to remove fat deposits and shape the body; iii) face-lift procedures which are intended to improve facial appearance and make a person look younger; and iv) rhinoplasty, a procedure which reshapes the nose and is one of the most common of all plastic surgery procedures.[45]

In some areas, these clinics are backed by a sophisticated research infrastructure. India is one of the world's leading centers for biotechnology research, while both India and South Korea are pushing ahead with stem cell research at a level approached only by Britain.[46] As a result, "Medical tourism has become a market of one billion dollars [...] The reasons are many, but most are for lower costs, less waiting time in certain procedures or medical technology superior to that of their country of residence."[47]

Moreover, medical tourism is growing in emerging countries. Its potential is recognized, but its evolution is slow because their institutional regulation and human capital are in progress.

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[42] Turner, "First World Health Care at Third World Prices," 305.
[43] U.S.-México Chamber of Commerce. Reporte 3: Desarrollo de Turismo, 4.
[44] Turner, "First World Health Care at Third World Prices," 315.
[45] Kumar, "Designing Promotional Strategies," 88.
[46] Cetron and DeMicco, "Club Medic," 15.
[47] Patrichi and Dodu, "Medical Tourism – A Business or a Necessity?" *Journal of Tourism – Studies and Research in Tourism* 18 (2014): 48.

Context of Medical Tourism in Ciudad Juárez-El Paso

The state of Chihuahua borders the U.S. states of New Mexico and Texas. It is one of the main gateways for trade between Mexico, the United States, and Canada. However, complexity is the main topic at the U.S.-Mexico border because "currently it faces startling contradictions and although it has been studied from different points due to its complexity and dynamism of the border has not yet been possible to unravel the contexts in which it is immersed."[48] Therefore, visualization of cities as an entity is required. The binational region makes interdependent contributions, and sometimes it is complementary and sometimes competitive. It is worth noting that the number of border-crossings between Ciudad Juarez and El Paso in 2013 was more than 22 million, ranking second according to the U.S. Department of Transportation, Bureau of Transportation Statistics.

The Paso del Norte Region, consisting of Ciudad Juárez, Chihuahua, El Paso, Texas, and Las Cruces, New Mexico, shares a territorial space, which reflects the mix of lifestyles, attitudes, customs and traditions. This region (see Figure 3) offers the visitor five international ports of entry, thereby achieving growth in the number of visitors to both sides of the border.

> The North American Borderplex Region [Paso del Norte] has vast potential for the development of tourism industries. The rich past of the combined area draws together the opportunity to develop a triad of related cultural sites drawing on the history of the Old West in El Paso, Old Mexico and Mexican culture in Cd. Juárez, and Native American history and culture in Las Cruces. Developing cooperative tourism locations and industries that tie together planned activities could provide an interesting draw for domestic as well as international tourists.[49]

A limitation on cross-border development in the period between 2008-2013 was the violence for control of routes between Mexico and the United States; this violence has darkened the interaction between border communities. But nevertheless, "[…] the best demonstration of cooperation and collaboration is that despite the violence, the two countries co-exist with each other for three hundred and sixty five days of each year." [50]

Ciudad Juárez, as urban space located on Mexico's northern border with the United States, has its own features designed to improve the health conditions of the people, having a demand for health services and the assessment of the needs of the population. Also, Ciudad Juárez has an urban structure linked to roads resulting from access to the busiest crossing points in the movement of

[48] Tomás Cuevas, Esther Carmona and Isabel Zizaldra, "Turismo Transfronterizo Reticular. Exploración del caso como ciudades hermanas: Ciudad Juárez, Chihuahua-El Paso, Texas," in *Turismo en la frontera del conocimiento entre la modernidad y la posmodernidad,* México: (UACJ / Academia Mexicana de Investigación Turística, 2012).

[49] Angelos Angelou, "The Power of Collaboration. One Region, One Voice. 2015 Strategic Recommendations, June 2," *The Borderplex Alliance* (2015): 107. Accessed September 5, 2015: *www.angeloueconomics.com*

[50] Manuel Chavez, "Border Theories and the Realities of Daily Public Exchanges in North America," *Eurasia Border Review* 3-1 (2012): 114.

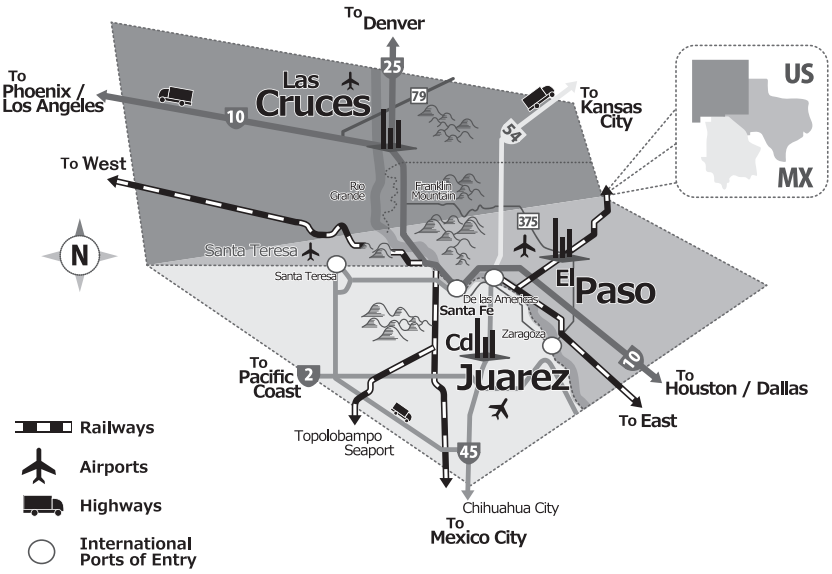


Figure 3: The Paso del Norte Region

Source: Authors's rending, based on http://hubofhumaninnovation.org/

people between the two countries, with specific demands on primary health care and other health services. Moreover, Ciudad Juárez has an international airport that receives annually about 640,000 passengers while the international airport of El Paso, Texas, serves nearly three million passengers a year.

Hence, answering the following questions could overcome some doubts about medical tourism: How important are public and private health services for medical tourism? How do distributions of health services affect medical tourism in the binational area? In what manner do tourist attractions and services influence medical tourism? And, what are the issues for qualitative medical tourism in the binational areas?

The general objective of this research is focused on assessing if conditions in the Ciudad Juarez-El Paso bi-national area are conducive to the selection of it as a medical tourism destination. Meanwhile, the specific objectives are the following: a) Evaluate health services in Ciudad Juarez and their influence on the binational area; b) Contrast the general terms of tourist services, attractions and health in the binational area, and c) Analyze the qualitative conditions of the binational area in relation to medical tourism.

Working Hypotheses

The following hypotheses are proposed in this paper:

H 1. Centers or poles of attraction and / or capacity; hotels, restaurants, attractions and nightclubs; in the Ciudad Juarez-El Paso border area can be the motivation for medical tourism and wellness.

H 2. Each center acts as a core of star tourist products that can be consumed in tours and

visits lasting hours or for more than 24 hours between the destinations of Ciudad Juarez and El Paso.

Methodology

To test these hypotheses a quantitative and qualitative research approach was utilized. Territory buffer analysis was used to create a proximity zone around geographical entities, which allowed for the identification and evaluation in the Ciudad Juarez-El Paso border area of hospitals, hotels, restaurants, attractions and nightclubs in a two-mile wide radius of influence. Each radius of influence and cores were distributed in the binational area based on INEGI National Statistics Directory of Economic Units 2010.[51] Territorial analysis of the relationship between tourism and medical services in the binational area were used to construct visualization maps of health and tourism services in each of the communities.

Discussion

It should be mentioned that only the cities of Juarez and El Paso were considered as binational areas. Even the proximity of the city of Las Cruces, New Mexico, was not represented for the study. Table 1 shows the difference between the contribution hospitals, both public and private. The nature of health services in Ciudad Juárez was divided into five types: private hospitals; public hospital; private general hospitals; public general hospitals; and private psychiatric and addiction treatment hospitals. Figure 4 shows that hospitals are concentrated in six areas (A1, A2, A3, etc.) in a two-mile wide area.

The maps and tables show the grouping of tourist services and leisure-related health care. It also shows eight elements from the qualitative scope. These considerations allow a better understanding for medical tourism in the binational region. The considerations are location, market, medical professionals and connections with the world.

Table 1: Total Hospitals Public and Private Health Service

Type	Area 1	Area 2	Area 3	Area 4	Area 5	Area 6	Out	Total
Private Hospital other medical specialties	0	10	3	7	4	4	0	28
Public Hospital of other medical specialties	0	0	1	0	0	0	0	1
Private General Hospitals	3	9	3	3	8	3	0	29
Public General Hospitals	3	3	0	2	1	3	2	14
Private Psychiatric and addiction treatment	0	1	0	0	0	0	0	1
Gran Total	6	23	7	12	13	10	2	73

Source: Authors's elaboration based on INEGI *

* INEGI, *Directorio Estadístico Nacional de Unidades Económicas 2010* (DF: Instituto Nacional de Estadística y Geografía, 2011).

[51] INEGI, *Directorio Estadístico Nacional de Unidades Económicas 2010* (DF: Instituto Nacional de Estadística y Geografía, 2011).

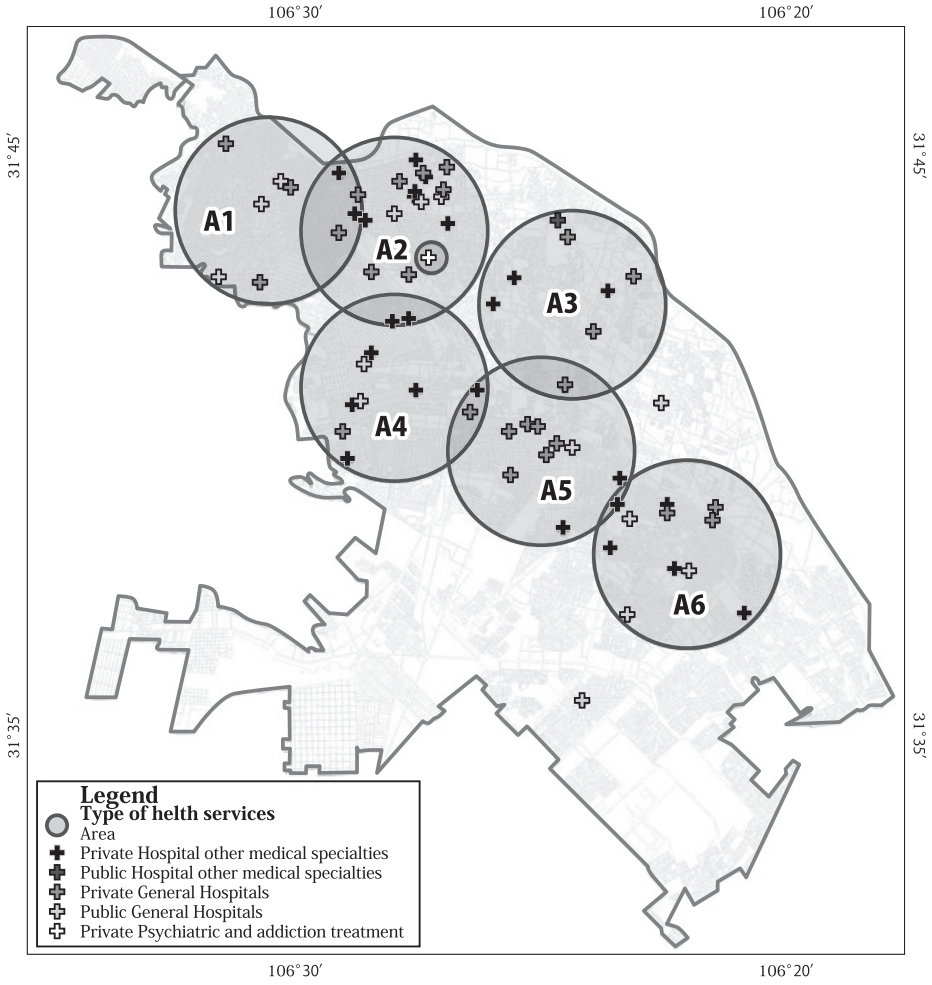


Figure 4: Distribution of Health Services in Ciudad Juarez

Source: Author's rendering based on INEGI* Based on data and Arc View software

* INEGI, *Directorio Estadístico Nacional de Unidades Económicas 2010* (DF: Instituto Nacional de Estadística y Geografía, 2011).

Table 2: Area Figures of Health Services

Area 1	Area 2	Area 3	Area 4	Area 5	Area 6	Out	Total
8%	32%	10%	16%	18%	14%	3%	100%

Source: Own Source, based on INEGI (2011)

There is a lack of formal development plans regardless of the coordination of actions with the Municipal Research and Planning Institute (IMIP) and Borderplex. Various actors (public and private) in different periods have tried to work on medical tourism. However, these actions are often forgotten and not sustained over time.

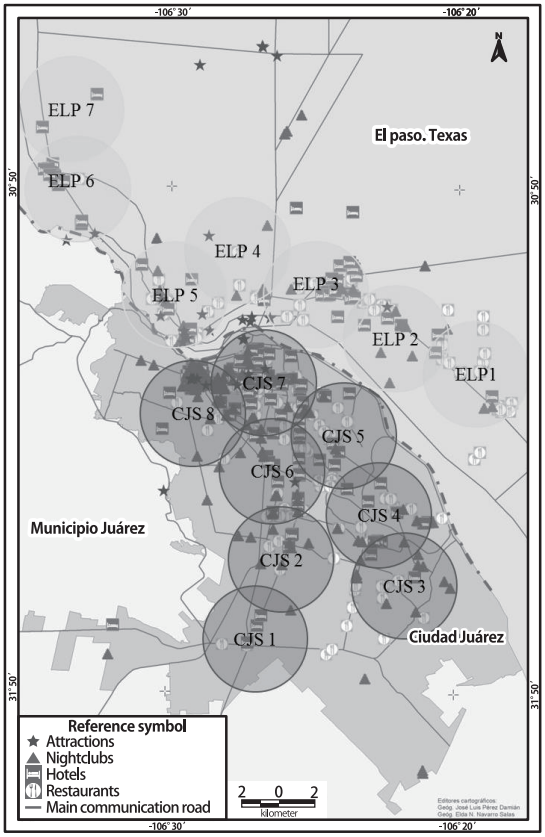


Figure 5: Hotels in the Binational Area

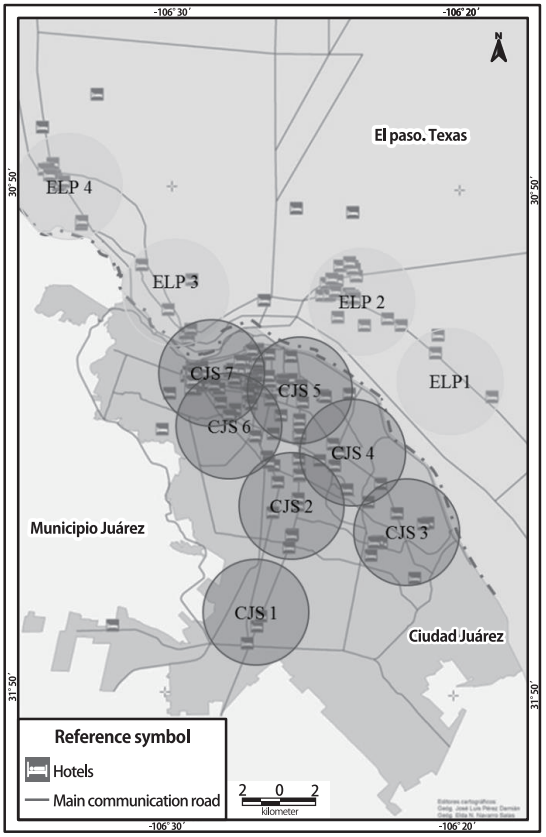


Figure 6: Attractions Restaurants and Night Clubs in the Binational Area

Symbols:

=Hotels (CJS1) =Ciudad Juarez (ELP1) =El Paso -·-·-·- =Border =Restaurants ▲ =Night Clubs ★ =Attractions

Source: Own Source, based on INEGI* Data and Arc View software

* INEGI, *Directorio Estadístico Nacional de Unidades Económicas 2010* (DF: Instituto Nacional de Estadística y Geografía, 2011).

Table 3: Tourist Services in the Binational Area CJS-ELP

Tourist services	El Paso		Ciudad Juarez		Binational area	
Hotels	57	34%	36	13%	93	21%
Restaurants	69	42%	120	43%	189	43%
Attractions	9	5%	20	7%	29	6%
Nightclubs	31	19%	102	37%	133	30%
Total	166	100%	278	100%	444	100%

Source: Authors based on INEGI*

* INEGI, *Directorio Estadístico Nacional de Unidades Económicas 2010* (DF: Instituto Nacional de Estadística y Geografía, 2011).

Table 4: Qualitative Medical Tourism at Binational Area

Variable	Assessment Rational	Leading	Strong	Average	Weak
Geostrategic position	It is significant, by the interaction with neighboring southern states of the United States.				
Location	It is the starting point for intermediation Medical Tourism and Wellness to be projected globally.				
Connected to the world	Two international airports nearby with about 25 direct destinations connecting more than 4 million passengers between them.				
Market potential	500,000 potential patients by air.				
Border crossings	A total of 7 in the vicinity with the State of Texas and Nuevo Mexico.				
Ranked second in crosses	Between US-Mexico over 22 million, representing a potential market of nearly 2 million patients.				
Medical services	Competitive on the international market, being up to 40% lower cost. relative to the United States.				
Association of medical and health professionals	Support health and wellness, with commitment to the petient, focusing on quality, give the patient confidence in services.				

Source: Authors renderings, based on Promexico data *
* PROMÉXICO, *Turismo de Salud.*

Table 1 shows that public and private health service with attention to private hospitals and other medical specialties comprise 38% of total care services; public hospitals of other medical specialties comprise 1%; private general hospitals comprise 40%; public general hospitals comprise 19%; and private psychiatric and addiction treatment comprise 1%. Timothy argues, "[…] border regions need special considerations from a planning perspective. Owing to their location on the national periphery in physical terms and on the national fringe in socio-economic terms, frontier regions are often ignored by central governments." [52]

An important consideration of the phenomenon of health services in Ciudad Juárez is that 79% of hospitals are private and 21% are public. Just one of them is for medical specialties. It can be argued that: "The medical tourism industry also contributes to the further commodification of health services. Countries offering universal health care emphasize treating patients according to need. The medical tourism industry arranges care based upon what customers can afford."[53] On the other hand, "countries that share common-borders may collaborate in providing cross-national public funding for health care from providers across borders. Frequent cross-border flows […]."[54]

Figure 6 shows a two-mile wide area offering the different kinds of services related to tourism activity (e.g., hotels, restaurants nightclubs and attractions). It illustrates the convenience with the distribution of health services in figure 4. They are concentrated in eight areas in Ciudad

[52] Timothy, *Tourism and Political Boundaries*, 169.
[53] Turner, "First World Health Care at Third World Prices," 322.
[54] Lunt and Carrera, "Medical Tourism," 28.

Juárez (CJS) – El Paso (ELP). We can find only three hospitals in the binational region. Therefore, it is related to the location of hospitals and tourism services in the case of Ciudad Juárez. Meanwhile, there are four specific cross points.

For that reason, in the state of Chihuahua, medical tourism is more centered on Ciudad Juárez. Its experience comes from the last century, initially with dental, optometric and pharmaceutical services. Likewise, in 1949 the first private hospital was opened. In the 1990s, another two hospitals began providing similar services. In 2007, a hospital with high-level care also started to compete due to quality and technology, eventually developing more competitive medical services.

The complementary tourism in Ciudad Juarez is integrated by food and beverage services, such as restaurants, cafes, bars, fast food restaurants, takeaways and catering services. Figure 6 displays attractions, restaurants, and nightclubs. In CJS, the logic of analysis is that it is from south to north, bound for the border. The shape is in clusters industry and the conglomerate area overlaps in some cases for the density of business. The behavior of the establishments in ELP is different, and is east- to west. The pattern follows nearby Interstate 10. Only a few are in the periphery.

There is a difference in the performance and range of accommodation between CJS and ELP (Figure 7). Restaurant offerings are similar in CJS (43%), and ELP (42%), and between the two communities contribute 43% as a binational area. As for tourist attractions, CJS represents 7% while ELP represents 5%, with an average of 7% between them. The situation is similar for nightclubs and hotels – CJS is 37%, ELP – 19%, with both contributing about 30% to the binational area. In this regard, the need for balance in the area and for offering binational entertainment is significant. Crăciunescu states that projecting a city as a touristic destination:[55]

> […] represents a balanced approach between local resources (either in terms of heritage and in terms of infrastructure, from food providers, shopping centers, wellness resorts, business meeting places and so on) local pride and the wish for commodifying the authentic into a luring story packaged through the techno-semantics that advertising at all levels provide.

Figure 7 shows the indicators in the binational area and individual behavior as a city. In both cases it is possible to define buffer zones of health services and tourist attractions. Significantly, the highest density is in the center of the city (A 2; CJS 5; CJS 6; and CJS 7). In reality, it is health and wellness benefits for visitors. CJS also provided in another area with a lower density (CJS 4 and 2); in these areas, this is a new development in the city. This is supported with shopping malls, hospitals, hotels, restaurants and entertainment centers.

According to Woodman, "The overwhelming majority of health travelers we interview[ed] had focused on researching, locating and receiving quality health care at significant cost savings.

[55] Ana Crăciunescu, "Urban Reconfigurations of Space and Place within Township Tourism," *Journal of Tourism Studies and Research in Tourism* 19 (2015): 51.

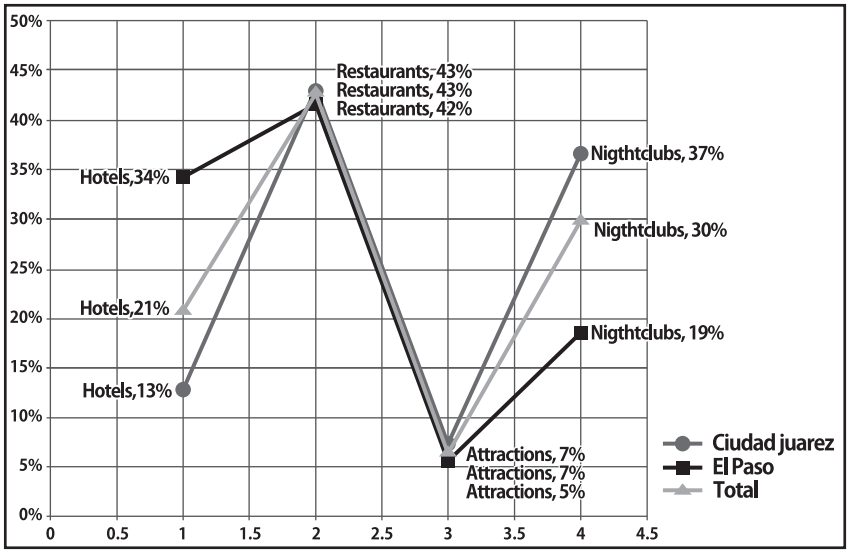


Figure 7: Tourist Local Resources between Ciudad Juárez-El Paso

Source: Author's rendering based on INEGI *

* INEGI, *Directorio Estadístico Nacional de Unidades Económicas 2010*.

Vacation and leisure time played second fiddle."[56]

Tourism and health are human activities (Table 4). Thus, it is relevant for visitors to achieve their priorities on wellness and security. Reyes and Flores proposed potentially strategic steps to develop wellness and medicals services at border tourism destinations.[57] Some of their proposals are: Promote binational medical partnerships (building trust and partnerships); develop a joint strategy with hospitals; develop qualitative competitiveness; implement a fast lane for medical patients at international crossings; introduce binational medical insurance coverage; and strengthen the network of physicians who provide insurance services and promote confidence internationally.

Conclusion

Mexico as a medical destination has opportunities to develop its northern region. In fact, global competitiveness is emerging in health, because more individuals in developed countries consider overseas health travel to developing countries. Ciudad Juarez is an emerging medical tourism destination. However, public policies that support these binomial priorities (health and tourism) are required. This support is essential to trigger actions and programs for national and international coordination with the various participants, both public and private, as well as with the three levels of government (federal, state, and municipality), and associations of medical professionals, health service providers, tourists and others.

[56] Woodman, *Patients Beyond Borders*, 70.

[57] Reyes and Flores, *Turismo de Salud en la Frontera.*

The orientation of the study is to understand what kind of medical services and entertainment encourage visitors to select certain medical tourist destinations. This research is a first attempt to use buffer zones from tourism studies in order to describe areas around real-world entities. In this sense, it allows the identification of buffer zones from the tourist attractions and services perspective, such as support services and other attractions related to medical tourism and health. Additional product integration can meet the needs of visitors, while cooperation in cross-border tourism development projects also have implications for national sovereignty and international policy.

There is a lack of formal development plans, especially for medical tourism in Ciudad Juárez, and the actions of various stakeholders and actors in previous years have not been tracked. This situation is probably due to the complexity of the phenomenon as different types of services are integrated, such as travel, health, trade, hotel accommodation, entertainment and so on.

The core area of health service in CJS is competitive, as it includes private hospitals with high standards and health professionals from different medical specialties. Correspondingly, the different kind of tourism services (e.g., hotels, restaurants nightclubs and attractions) offers the convenient distribution of health services. Meanwhile, there are two specific cross-points in the downtown area and the Pronaf area.

The sister cities (CJS-ELP) offer different kinds of services in the dining and entertainment industry. The variety is a sign of a strengthening in the binational area. It is a buffer zone dedicated to international companies and domestic tourism.

Another key point, from the qualitative perspective is that medical tourism offers a geostrategic position, border location, increasing of crossings, more crossing points, and strengthening of professional medical associations. Other variables include connectivity to the world (i.e., airlines, airports and roads), diversified companies, and market potential. However, the best positioned are health and medical services, which represent a remarkable situation because of their implications for the development of specific products in medical tourism. Under these circumstances, an analysis of maps demonstrates opportunities for both cities. Tourism, leisure and health services are identified as priorities for international and national visitors.

Finally, this paper considered the business competitiveness and buffer zones supporting the development of medical tourism. This approach is related to different influences for selecting a destination, whereby the destination’s characteristics are an important factor for visitors, and it represents the beginning of further spatial explorations into the destinations and variables of health, medical care and tourism.