# An Overview of Guatemala's Medical Tourism Industry



Version 2.0

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Medical tourism occurs when patients travel internationally to obtain privately-funded medical care. Medical tourism is a global practice, with hospitals and clinics in a diverse array of destination countries vying to treat such international patients. Guatemala is one of these destination countries. In this document we provide an overview of Guatemala's nascent medical tourism industry. This overview has been generated based on information gleaned from media and policy sources, field notes taken during site visits to public and private health care facilities in the country, immersive observational research, and informal conversations with various stakeholders in Guatemala's medical tourism industry.

Our research group is interested in developing a better understanding of the health equity impacts of medical tourism on destination countries. In other words, we are interested in understanding if and how medical tourism is helpful and/or harmful to people living in destination countries and their health. Guatemala is one of four countries that our work is focused on, which is why we have produced this profile. The medical tourism industries in Barbados, India, and Mexico are also being examined. We are studying the medical tourism industries and their impacts in these countries as part of an international grant funded by the Canadian Institutes of Health Research. You can learn more about our research by visiting: www.sfu.ca/medicaltourism/

In the sections that follow we offer some general information on Guatemala and its health system before going into detail about key developments in its medical tourism industry. Complementing the main text, four Appendices provide additional detailed insights. Appendix 1 offers a synthesis of media coverage of medical tourism in Guatemala's main newspapers in recent years. In Appendix 2 we share a summary of policy documents central to medical tourism in Guatemala. In both of these Appendices we consider five health equity indicators most often discussed in the medical tourism literature: (1) impacts on health human resources; (2) government involvement in the industry; (3) foreign investment in the industry; (4) impacts on private health care; and (5) impacts on public health care. In Appendix 3 we provide maps of medical tourism facilities in the country. Finally, trade and investment treaties in Guatemala are provided in Appendix 4.

# 1. AN OVERVIEW OF GUATEMALA

Sitting just south of Mexico, Guatemala was a Spanish colony until independence in 1821 (U.S. Department of State, n.d.). Politically, Guatemala has experienced a series of both military and civilian governments during its history. A 36-year guerrilla war that ended with a peace agreement in 1996 led to over 100,000 casualties and nearly a million refugees. Guatemala has just over 100,000 square kilometers of land, and 400 kilometres of coastline in Central America (U.S. Department of State, n.d.). Its location makes it particularly vulnerable to hurricanes, earthquakes, and volcanic eruptions (U.S. Department of State, n.d.). Environmental issues Guatemala faces include deforestation, soil erosion and water pollution (U.S. Department of State, n.d.). The two major tourist cities are Guatemala City and Antigua (SurgeryPlanet, 2010).

Guatemala's main export partners are the US (42.6%), El Salvador (12.2%), and Honduras (8.6%). It imports from the US, Mexico, and the European Union, with the US being the major contributor of imports at 34.1% of the total (in 2007). Guatemala's natural resources include petroleum, nickel, fish, and hydropower (U.S. Department of State, n.d.). Agriculture accounts for 15% of Guatemala's GDP and half of its employment (U.S. Department of State, n.d.). Industry and other services account for 24.4% and 62.3% of the GDP, respectively (U.S. Department of State, n.d.). Its main agricultural products include coffee, sugar, and bananas (Menkos et al., 2009). Income distribution is very inequitable, with the top 10% of income earners controlling 40% of the country's overall consumption (U.S. Department of State, n.d.). Guatemala is ranked as a lower middle-income country, according to the DAC list of Overseas Development Aid in 2007.

Guatemala's population is estimated at 13.5 million people. This population includes a high proportion of young people, with 39.4% between 0-14 years, 56.8% between 15-64, and only 3.8% over the age of 65 (U.S. Department of State, n.d.). The median age is 19.7 years (U.S. Department of State, n.d.). The estimated population growth as of 2010 was 2.019%, with a birth and death rate of 27.4 and 5.04 per 1,000 people, respectively (U.S. Department of State, n.d.). An estimated 49% of the population lives in urban areas, and the rate of urbanization is 3.4% (U.S. Department

of State, n.d.). Languages spoken include Spanish and 23 recognized Amerindian languages (U.S. Department of State, n.d.). On the UN's Human Development Index (HDI) – a composite measure of health, education, and income – Guatemala ranks 116 out of 169 countries (UNDP, n.d.). It is the lowest HDI ranking in Latin America, with the exception of Haiti (Menkos et al., 2009). In comparison, Canada's HDI ranking is 8 (UNDP, n.d.).

In terms of health indicators, Guatemala's life expectancy at birth is 70.8 years (UNDP, n.d.). Guatemala spends 2.1% of its GDP on health (UNDP, n.d.). Undernourishment is experienced by 16% of the total population, and the under-five mortality is 35 per 1,000 live births (UNDP, n.d.). The infant mortality rate is 26.91 per 1,000 live births (U.S. Department of State, n.d.). The maternal mortality ratio is 290 deaths per 100,000 live births (Menkos et al., 2009). The adolescent fertility rate in women aged 15-19 years is 107.2 births per 1,000 women in this age group (UNDP, n.d.). These fertility rates are among the highest in Latin America (Menkos et al., 2009), yet it is reported that only 41% of women have a qualified health professional attendant when they give birth (Menkos et al., 2009). The Gender Inequality Index value for Guatemala is 0.713, in comparison to Canada at 0.289 (UNDP, n.d.). Over one tenth of the population lives on less than $1.25 per day (UNDP, n.d.), and 50% of the population lives below Guatemala's national poverty line (Menkos et al., 2009). Within indigenous communities, the members of which account for 38% of the population, poverty is a particularly serious issue. Seventy percent of indigenous children are malnourished, compared with 36% of non-indigenous children (Menkos et al., 2009). Maternal mortality rates are also three times higher among indigenous populations (Menkos et al., 2009).

The GDP of Guatemala is USD$70.31 billion (U.S. Department of State, n.d.), making it the largest economy in the Central American region (Menkos et al., 2009). Per capita, the GDP is USD$4,761, but the country suffers drastically in terms of social indicators (Menkos et al., 2009) as represented by its Gini coefficient of 53.7 (UNDP, n.d.). In terms of the Index of Economic and Social Rights Fulfillment, Guatemala ranks 67 of 107 countries (Menkos et al., 2009). The national unemployment rate, as a percent of the labour force, is 1.8% (UNDP, n.d.).

Guatemala has traditionally devoted a low proportion of GDP to social spending (Menkos et al., 2009). It is one of the lowest in the Latin American region, which may be a result of low tax collection and large tax exemptions for the country's wealthy (Menkos et al., 2009).

Guatemala spends 3.2% of its GDP on education (UNDP, n.d.), and the average number of years of schooling among adults is 4.1 years. Access to education is expanding however, and the expected number of years of schooling for children is currently 10.6 (UNDP, n.d.). Guatemala continues to have significant inequalities in numbers of boys and girls who complete primary school (Menkos et al., 2009). Guatemala's national literacy rate is 69.1%, but those gender disparities in education result in gendered differences in youth literacy rates (Menkos et al., 2009).

Crime is also an issue in Guatemala. There are 45.2 homicides per 100,000 people (UNDP, n.d.), but the most common crime is robberies along high tourist-traffic routes (MedicalTourism.com, 2011). It is on the Tier 2 Watch List for failing to effectively combat the human trafficking industry. Guatemala is both a source and a destination for women and children trafficked for labour and sexual exploitation (U.S. Department of State, n.d.). Mexico and the United States are common destinations for trafficked persons (U.S. Department of State, n.d.). Guatemala also faces significant drug trafficking issues, as it is a major transit and source country for heroin and marijuana. The presence of significant money laundering and corruption also create major problems for the country (U.S. Department of State, n.d.).

## 1.1 Economy

Guatemala is a lower-middle-income country (GNI per capita 4.9 in 2012) with a high level of wealth inequality (Gini index 55.1; 52% of consumption by 20% top income households)(U.S. Department of State, n.d.; World Bank, n.d.). Although the service sector represents more than half of the GDP and 48% of the labor force, Guatemala's main industries are sugar, textiles, clothing, furniture, chemicals, petroleum, metals, rubber and tourism. Guatemala exports primarily coffee, sugar, petroleum, apparel, bananas, fruits, vegetables, and cardamom; and its main export partners are the United States of America (39.2%), El Salvador (11.4%), Honduras (6.8%), Mexico (5.4%), and Nicaragua (4%). The country imports fuels, machinery, transport equipment,

construction materials, grain, fertilizers, electricity, mineral products, chemical products, and plastic products, from its main import partners, which are the Unites States of America (38.4%), Mexico (11.9%), China (8.3%), El Salvador (5.1%), and Colombia (4.2%) (U.S. Department of State, n.d.). With more than one million expatriates living in the United States of America, Guatemala is the top remittance recipient in the region, with inflows equivalent to two-fifths of exports or one-tenth of GDP (U.S. Department of State, n.d.).

TABLE 1. GUATEMALA'S ECONOMIC INDICATORS

| Indicator | |
|---|---|
| GDP (PPP) | 79.9 billion (US$ 2012) |
| GDP per capita (PPP) | 5,300 (US$ 2012) |
| Exports as GDP % | 24.9% |
| Imports as GDP % | -35.7% |
| Agriculture as GDP% | 13.4% |
| Industry as GDP% | 23.7% |
| Services as GDP% | 62.9% |
| Labor force | 4.4 million |
| Agriculture labor force | 38% |
| Industry labor force | 14% |
| Services labor force | 48% |
| Population below poverty line | 54% |
| Gini index | 55.1 (2007) |
| Taxes and other revenue | 11.7% GDP |

Source: (U.S. Department of State, n.d.)

The service sector has been growing in the last two decades at the expense of financial services, telecommunications, and tourism; and it is today the major contributor to the country's GDP ("Guatemala," 2013), as shown in Table 1 and Table 2. Trade in services has steadily represented about 10% of the country's GDP for more than one

decade (see Table 2), for which Guatemala is ranked 140 out of 167 countries (World Bank, n.d.).

TABLE 2. TRADE IN SERVICES IN GUATEMALA

| Indicator | 1981 | 1986 | 1991 | 1996 | 2001 | 2006 | 2011 |
|---|---|---|---|---|---|---|---|
| Trade in services (% of GDP) | 7.4 | 4.1 | 8.7 | 7.7 | 10.5 | 10.9 | 10.4 |
| **Service imports (million US$)** | **484.3** | **170.1** | **356.4** | **659.7** | **927.8** | **1,779.4** | **2,504.0** |
| Transport services as % of service imports | 37.3 | 51.4 | 51.6 | 43.5 | 50.2 | 51.3 | 49.1 |
| Travel services as % of service imports | 27.5 | 9.0 | 28.1 | 20.5 | 24.3 | 29.7 | 28.1 |
| **Service exports (million US$)** | **0.3** | **0.4** | **1.6** | **n.d.** | **n.d.** | **7.9** | **14.7** |
| Transport services as % of service exports | 19.7 | 23.7 | 31.7 | 38.7 | 53.7 | 60.5 | 57.2 |
| Travel services as % of service exports | 12.7 | 6.9 | 9.1 | 7.7 | 4.6 | 6.3 | 10.8 |

Source: (World Bank, n.d.)

Employment in services has also increased in the last decade, and it now represents more than half of the country's total employment, as shown in Table 3.

TABLE 3. EMPLOYMENT IN SERVICES IN GUATEMALA

| Indicator | 2000 | 2006 | 2007 | 2008 | 2009 | 2010 |
|---|---|---|---|---|---|---|
| Employment in services (% of total employment) | 48.7 | 53.4 | 54.1 | 54.5 | 54.8 | 55.3 |

Source: (World Bank, n.d.)

## Foreign investment

Guatemala has historically been open for foreign investment, and has also historically had disappointing results (United Nations Conference on Trade and Development, 2011). The post-war period starting in 1996 marks the current period of increased foreign investment inflows, as shown in Table 4, although the growth has been smaller than in the rest of Central American countries (United Nations Conference on Trade and Development, 2011). Guatemala's potential for attracting foreign investment is supported by its macroeconomic stability, the considerable size of its internal market (the largest in the Central American region), its geographical location, and its low labour costs. The main barriers to foreign investment are common and organized violence, weakness of key governmental agencies, and low public spending (United Nations Conference on Trade and Development, 2011). All sectors of the country's economy are open to foreign investment.

TABLE 4. FOREIGN DIRECT INVESTMENT IN GUATEMALA

| Year | Million US$ |
|---|---|
| 1981 | 1,476.6 |
| 1986 | 951.3 |
| 1991 | 964.3 |
| 1996 | 487.3 |
| 2001 | 2,487.3 |
| 2006 | 2,101.5 |
| 2011 | 2,304.7 |

Source: (World Bank, n.d.)

The countries of origin of most of the foreign investment inflows into Guatemala's economy are the United States of America, Mexico, United Kingdom, Spain and Canada, as shown in Table 5. Major U.S.A. companies invest in different sectors of the Guatemalan economy, such as "retail (Wal-Mart, PriceSmart), agriculture (Monsanto), manufacturing of consumer goods (Kimberley-Clark, Procter and Gamble), pharmaceuticals (Pfizer), food (Del Monte, Dole), and energy (Duke)" (United

Nations Conference on Trade and Development, 2011). Major investment from Mexican companies is in "telecommunications (Telmex/América Móvil), cement (Cemex), food and beverages (Bimbo, Gruma, Lala, Femsa), [...] and the only toll road operation (Marnhos)" (United Nations Conference on Trade and Development, 2011). Foreign investment from the United Kingdom "is mostly in consumer goods (Unilever)" (United Nations Conference on Trade and Development, 2011), while Spanish companies invest "predominantly in electricity (Unión Fenosa, Iberdrola), telecommunications (Telefónica), and tourism (Barceló)" (United Nations Conference on Trade and Development, 2011). Canadian investment is mainly in mining projects.

TABLE 5. FOREIGN DIRECT INVESTMENT BY COUNTRY OF ORIGIN, 2007-2009 (PERCENTAGE)

| Country | % of FDI |
|---|---|
| United States of America | 33% |
| Mexico | 10% |
| United Kingdom | 9% |
| Spain | 8% |
| Canada | 8% |
| Others | 32% |

Source: Modified from (United Nations Conference on Trade and Development, 2011)

TABLE 6. FOREIGN DIRECT INVESTMENT BY SECTOR, 2007-2009 (PERCENTAGE)

| Sector | % of FDI |
|---|---|
| Commerce/Finance | 28% |
| Manufacturing | 20% |
| Electricity | 12% |
| Telecommunications | 18% |
| Agriculture/Mining | 19% |
| Others | 3% |

Source: Modified from (United Nations Conference on Trade and Development, 2011)

As shown in Table 6, foreign investment is strongest in the commerce/finance sector, driven by investment in banking in recent years. The manufacturing sector is second in importance, with food and beverages, textile production, and metals as the main components of this sector. Electricity and telecommunications grew in importance thanks to the privatizations of the last two decades, while agriculture and mining have been stable for many years. There is little foreign investment in other activities, including the service sector (United Nations Conference on Trade and Development, 2011).

Although the service sector has been steadily growing in importance in Guatemala, foreign investment is still small in this sector, with promising forecasts in the BPO/call center, and the tourism industries. The BPO/call center has been the most successful in recent years, as shown in the following statement:

> "The BPO/call centre industry in Guatemala was a local initiative driven by domestic entrepreneurs back in the mid-1990s; the first foreign investors arrived in 1998. Due to its competitive costs, proximity to the United States of America ("nearshore") and the availability of English speakers (although there are fewer today), Guatemala is fast becoming a preferred outsourcing destination. In addition, this industry also benefits from the maquila incentives (Decree 29-89). At present, there are over 50 large in-house operations, half of which serve the international market. Major international BPO firms come from the United States of America (ACS, 24/7 Customer, NCO), Spain (Atento/Telefónica, Digitex), Mexico (RY6 Global), France (Capgemini), and India (Genpact)". (United Nations Conference on Trade and Development, 2011)

The tourism industry has steadily gained importance in Guatemala's economy, but it has not been successful in attracting foreign investment, as reflected in the following quote.

> "Tourism also presents a growth opportunity for FDI, although until now it is one of the worst performers in FDI attraction. After remittances, tourism is the second foreign exchange earner in Guatemala. In 2007, the tourism sector's total receipts were $1.2 billion, surpassing those of coffee, sugar, cardamom and other exports.

The supply of hotel rooms (20,840 rooms) does not meet the growing demand which has increased 4.5 times more than the available lodging capacity in 2003-2007. As such, FDI can drive investment and capitalize on tourism growth. At the moment, however, FDI to the sector has been held back by difficulties in the access to secure land titles and security and safety issues. Most international hotels in Guatemala are franchises managed by locals. An important exception to the norm is Barceló Hotels of Spain which bought Marriott Guatemala City Hotel for a reported $42 million in 2008." (United Nations Conference on Trade and Development, 2011)

## 1.2 Health Equity Indicators

Guatemala's population is largely young, with more than half living in rural areas, and almost half identified as indigenous (INE, 2006). Among Central American countries, life expectancy is the lowest and infant mortality is the highest; and among Latin American countries, chronic malnutrition in children is the highest, contraceptive use is the lowest, the fertility rate is the highest, and maternal mortality is the third highest (MOSCOSO AND FLORES, 2008; MSPAS, 2009A; SEGEPLAN AND MSPAS, 2011; WORLD BANK, 2004). However, these indicators are unequally distributed; with the poor, rural, and indigenous population having the worst health outcomes (UNDP, 2005; World Bank, 2004).

Maternal mortality is an indicator for which there is current information on health inequalities. Of the 494 maternal deaths registered in the national maternal mortality survey, 88.7% happened in women without secondary or tertiary education, with 48% occurring in women with no formal education (SEGEPLAN and MSPAS, 2011). Similarly, mortality rates are higher in departments (equivalent to county level) with higher poverty indexes or lower human development indexes (SEGEPLAN and MSPAS, 2011). Similar results are presented in Table 7 for other indicators.

TABLE 7. DISTRIBUTION OF SELECTED INDICATORS ACROSS SOCIAL GROUPS IN GUATEMALA

| | Maternal mortality (per 100,000) | Chronic under-nutrition in children | Fertility rate | Use of birth control methods (%) | Under 5 mortality rate (per 1000) | Birth in health care facility (%) | Measels vaccination coverage (%) |
|---|---|---|---|---|---|---|---|
| AREA | | | | | | | |
| Urban | 33.7 | 28.8 | 2.9 | 65.7 | 31 | 76.6 | 73.7 |
| Rural | 66.3 | 51.8 | 4.2 | 45.6 | 48 | 36.4 | 79.9 |
| REGION | | | | | | | |
| Metropolitan | 65.9 | 20.6 | 2.7 | 72.1 | 17 | 88.3 | 69.9 |
| North | 204.9 | 51.1 | 4.4 | 49.2 | 49 | 39.3 | 82.6 |
| Northeast | 173.6 | 41.3 | 3.4 | 53.6 | 47 | 52.8 | 78.2 |
| Southeast | 73.9 | 33.9 | 3.0 | 56.7 | 42 | 62.7 | 75.9 |
| Central | 114.8 | 38.5 | 3.4 | 62.6 | 27 | 63.0 | 74.7 |
| Southwest | 124.5 | 47.1 | 3.8 | 50.0 | 47 | 44.8 | 78.0 |
| Northwest | 212.7 | 64.8 | 4.6 | 34.1 | 52 | 20.8 | 83.3 |
| Peten | 186.1 | 36.6 | 4.3 | 46.5 | 67 | 43.1 | 77.6 |
| ETHNICITY | | | | | | | |
| Indigenous | 163.0 | 58.6 | 4.5 | 40.2 | 51 | 29.2 | 78.6 |
| Non-indigenous | 77.7 | 30.6 | 3.1 | 63.3 | 33 | 70.0 | 76.7 |
| EDUCATION LEVEL | | | | | | | |
| No education | n.d.* | 62.9 | 5.2 | 39.9 | 59 | 25.1 | 79.4 |
| Primary | n.d. | 43.3 | 3.8 | 53.9 | 38 | 50.5 | 77.3 |
| Secondary | n.d. | 16.3 | 2.3 | 69.0 | 23 | 88.9 | 76.4 |
| More than secondary | n.d. | 12.9 | | 74.0 | | 98.3 | 72.7 |
| TOTAL | 139.7 | 43.4 | 3.6 | 54.1 | 42 | 51.2 | 77.6 |

Source: (INE, 2006; SEGEPLAN and MSPAS, 2011)

# 2. UNDERSTANDING GUATEMALA'S HEALTH SYSTEM

The health sector in Guatemala is composed of a network of public institutions and private non-profit and for-profit institutions. The non-profit private sector includes non-governmental organizations (NGOs), and traditional Mayan medicine (PAHO, 2007). The Ministry of Public Health and Social Welfare (MSPAS) runs a health services network which consists of 1,304 hospitals, health centres, health posts and other facilities (PAHO, 2007). The Guatemalan Social Security Institute (IGSS), an autonomous institution financed through employer and employee contributions covers health services for workers in the formal sector (PAHO, 2007). It has 139 medical facilities across the country (PAHO, 2007). However, coverage for health care is neither comprehensive nor consistent throughout the country. In 1998 less than 60% of the population was reported to have the benefit of any form of health service coverage (PAHO, 2007). In the private sector, the health insurance system is limited, and the private for-profit sector (consisting of private hospitals, clinics, nursing homes, clinics, laboratories, and pharmacies) has limited coverage (PAHO, 2007). From 1995 to 2003, the total expenditure in private sector health insurance declined from US$3.94 million to US$2.6 million, while out-of pocket payments increased from US$32.78 million to US$54 million (PAHO, 2007).

Guatemala continues to have very limited progress in addressing the highly inequitable access to health care (Menkos et al., 2009). It has only 10 doctors and 4 registered nurses for every 10,000 people, which is half the number recommended by PAHO if a country is to provide universal access to medically necessary services (Estrada, 2008). Further, 73% of doctors are located in the urban capital of Guatemala, creating highly unequal distributions of health care providers throughout the country (Estrada, 2008).

Health services access is particularly poor for people in indigenous regions of the country. Transportation, time, and cost constitute barriers to care (Menkos et al., 2009). Cultural and language barriers are also experienced by pregnant women, for example, who report discrimination on the basis of their cultural traditions (Menkos et al., 2009).

Inadequate access to sexual and reproductive health services further limits Guatemala's health system (Menkos et al., 2009). There are significant numbers of unmet needs for contraception and attendance at childbirth (Menkos et al., 2009). Further, there have been barriers to implementing the 2006 Law of Universal and Equitable Access to Family Planning Services because of involvement by Catholic organizations (Menkos et al., 2009). As a result, Guatemala has very high fertility rates, and thousands of women die each year from unsafe abortions (Menkos et al., 2009).

According to 2006 data, there are 8,534 hospital beds in Guatemala, or 0.64 beds per 1,000 population (PAHO, 2007). Its hospitals are mainly located in Guatemala City, but hospitals have also opened in Escuintla and Suchitepequez in recent years. Popular hospitals include the Clinica Santa Maria and the Hospital Multimedica (SurgeryPlanet, 2010). The concentration of human resources in the metropolitan area and the shortage in the hospitals of physicians with basic specialties seriously undermines decision-making capacity at the rural outpatient and hospital levels. This current distribution is "a reflection of a centralized health care model that is heavily inclined toward curative medical care"(PAHO, 2007: 41). The greatest rate of health service expansion has been in the private sector. Between 1995 and 2004, 292 new private hospitals were registered, as well as 2,614 private clinics and 714 private laboratories (Estrada, 2008). Fifty-eight percent of these were concentrated in the metropolitan area of the capital (Estrada, 2008).

## 2.1 Health Human Resources

Guatemala's health human resources are highly concentrated in Guatemala City's metropolitan area. According to data from the Guatemalan Medical Association (*Colegio de Médicos de Guatemala)* 80% of the country's almost 13,000 accredited physicians based their practice out of either Guatemala City or Quetzaltenango (the country's second largest metropolitan area), as shown in the table below. Likewise, 2007 data from the Guatemalan Dentists Association (*Colegio Estomatológico de Guatemala*) shows that 82% of the nation's 2,376 dentists reside in those two cities' metropolitan areas. Although the 12,452 nurses are comparatively more equally distributed among the country's twenty-two departments, almost 50% are concentrated in Guatemala City, according to 2008 (Ayapán, 2012).

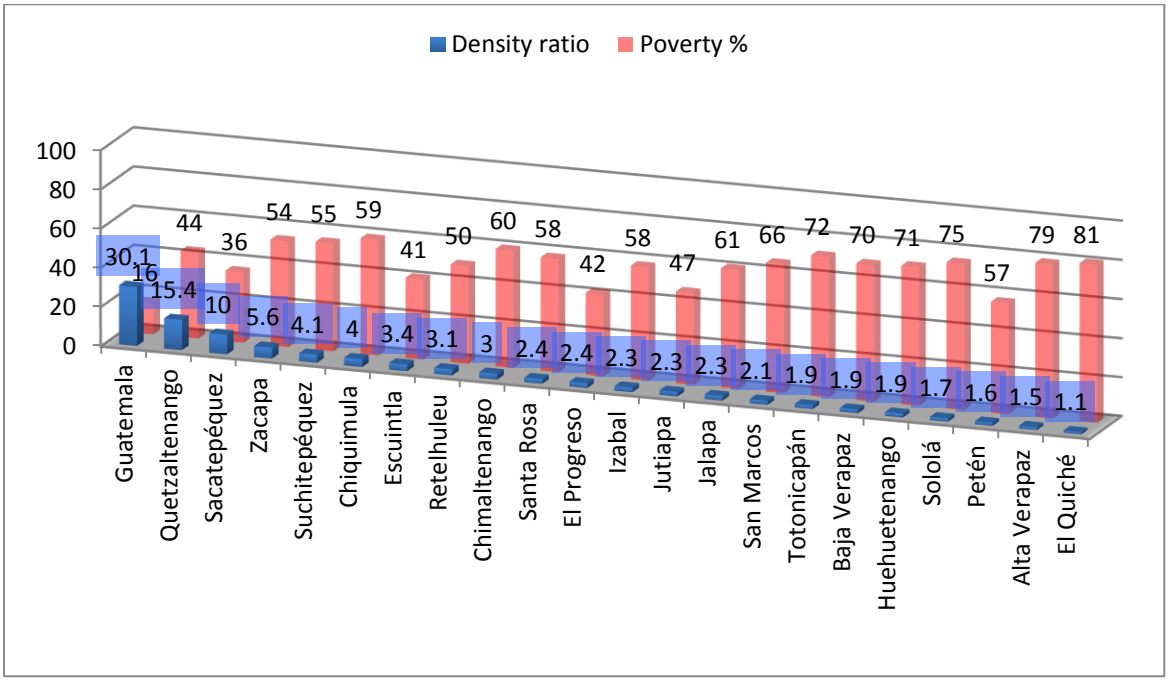
TABLE 8. HEALTH HUMAN RESOURCES, DISTRIBUTION BY DEPARTMENT

| | Physicians | | | Dentists | | | Nurses | | |
|---|---|---|---|---|---|---|---|---|---|
| Department | # | % | Density* | # | % | Density* | # | % | Density* |
| Guatemala | 9,185 | 71.0 | 30.1 | 1,856 | 78.1 | 5.6 | 5,903 | 47.4 | 20.1 |
| Quetzaltenango | 1,161 | 9.0 | 15.4 | 100 | 4.2 | 1.8 | 293 | 2.3 | 7.2 |
| Sacatepéquez | 303 | 2.3 | 10.0 | 25 | 1.0 | 1.6 | 556 | 4.5 | 13.5 |
| Zacapa | 120 | 0.9 | 5.6 | 46 | 1.9 | 1.7 | 489 | 3.4 | 9.4 |
| Chiquimula | 145 | 1.1 | 4.1 | 30 | 1.3 | 1.2 | 371 | 3.0 | 8.6 |
| Suchitepéquez | 196 | 1.5 | 4.0 | 16 | 0.7 | 0.9 | 523 | 4.2 | 10.3 |
| Escuintla | 225 | 1.7 | 3.4 | 19 | 0.8 | 0.5 | 377 | 3.0 | 8.7 |
| Retalhuleu | 89 | 0.7 | 3.1 | 39 | 1.6 | 1.0 | 311 | 2.5 | 8.4 |
| Chimaltenango | 173 | 1.3 | 3.0 | 9 | 0.4 | 0.4 | 248 | 2.0 | 5.7 |
| Santa Rosa | 79 | 0.6 | 2.4 | 16 | 0.7 | 0.6 | 295 | 2.4 | 7.6 |
| Jutiapa | 103 | 0.8 | 2.4 | 34 | 1.4 | 1.0 | 391 | 3.1 | 8.8 |
| El Progreso | 35 | 0.3 | 2.3 | 14 | 0.6 | 0.7 | 522 | 4.2 | 10.0 |
| Izabal | 89 | 0.7 | 2.3 | 21 | 0.9 | 0.8 | 317 | 2.6 | 8.5 |
| Jalapa | 68 | 0.5 | 2.3 | 33 | 1.4 | 1.0 | 199 | 1.6 | 5.1 |
| San Marcos | 206 | 1.6 | 2.1 | 29 | 1.2 | 0.5 | 235 | 1.9 | 5.6 |
| Totonicapán | 87 | 0.7 | 1.9 | 6 | 0.2 | 0.4 | 143 | 1.1 | 3.4 |
| Huehuetenango | 211 | 1.6 | 1.9 | 9 | 0.4 | 0.5 | 144 | 1.2 | 3.6 |
| Baja Verapaz | 49 | 0.4 | 1.9 | 33 | 1.4 | 0.5 | 484 | 3.9 | 8.8 |
| Petén | 100 | 0.8 | 1.7 | 1 | 0.0 | 0.1 | 218 | 1.7 | 5.5 |
| Sololá | 64 | 0.5 | 1.6 | 11 | 0.5 | 0.2 | n.d. | n.d. | n.d. |
| Alta Verapaz | 157 | 1.2 | 1.5 | 23 | 1.0 | 0.4 | 146 | 1.2 | 3.8 |
| Quiché | 95 | 0.7 | 1.1 | 6 | 0.2 | 0.2 | 253 | 2.0 | 5.9 |
| Total | 12,940 | 100 | 9.2 | 2,376 | 100 | 5.6 | 12,452 | 100 | 8.9 |

* Density ratio: number of physicians/nurses/dentists per 1,000 inhabitants. Source: modified from (Ayapán, 2012)

Physicians and dentists are concentrated in the country's wealthiest departments, as the figure below shows. Generally, departments with more than 70% of residents living in poverty have less than two physicians for 1,000 inhabitants (Ayapán, 2012).

FIGURE 1. PHYSICIAN DENSITY RATIO AND POVERTY BY DEPARTMENT




Source: Modified from (Ayapán, 2012)

Within the Ministry of Health, available data shows the distribution of health care personnel across the different types of health care facilities in which services are organized, with the exclusion of Ministry of Health's hospitals, from which there is no available information. The table below shows that about 40% of the total personnel is related to health care, and the vast majority of those are nurse aides, while there are very few medical doctors with specialties outside of hospitals. The table also shows private providers with flexible labor that are funded by the Ministry of Health to provide health care in rural areas (PSS, *Prestadoras de Servicios de Salud*) are half of the total workforce (Ayapán, 2012).

TABLE 9 DISTRIBUTION OF HUMAN RESOURCES IN THE MINISTRY OF HEALTH BY TYPE OF FACILITY (2008)

| Profession | Health Post | Health Center | CAP | CAIMI | PSS | Total | % |
|---|---|---|---|---|---|---|---|
| Physician | 252 | 447 | 418 | 32 | 92 | 1241 | 7.0 |
| MD specialist | 0 | 25 | 7 | 13 | 2 | 47 | 0.3 |
| Nurse aide | 1101 | 1481 | 1215 | 142 | 158 | 4097 | 23.1 |
| Nurse | 44 | 291 | 292 | 25 | 123 | 775 | 4.4 |
| Rural health technician | 124 | 214 | 48 | 5 | 29 | 420 | 2.4 |
| Environment supervisor | 26 | 205 | 37 | 3 | 1 | 272 | 1.5 |
| Dentist | 3 | 50 | 14 | 5 | 0 | 72 | 0.4 |
| Psychologist | 0 | 22 | 3 | 2 | 1 | 28 | 0.2 |
| Sanitary Engineer | 0 | 0 | 0 | 2 | 0 | 2 | 0.0 |
| Other | 66 | 986 | 706 | 57 | 8998 | 10813 | 60.9 |
| Total | 1616 | 3721 | 2740 | 286 | 9404 | 17767 | 1000 |
| % | 9.1 | 20.9 | 15.4 | 1.6 | 52.9 | 100 | |

CAP: *Centro de Atención Permanente* (24-hour health centers with a few beds), CAIMI *Centro de Atención Integral Materno Infantil* (similar to CAP). PSS *Prestadora de Servicios de Salud* (private NGOs with public funding and flexible labor). Source: Modified from (Ayapán, 2012)

TABLE 10. MINISTRY OF HEALTH'S HUMAN RESOURCES MONTHLY INCOME (SALARY + BENEFITS, US$), 2009

| Job position | monthly income (US$) |
|---|---|
| Paramedic 1 | 293 |
| Paramedic 2 | 306 |
| Paramedic 3 | 371 |
| Paramedic 4 | 392 |
| Chief paramedic 1 | 425 |
| Chief paramedic 2 | 451 |
| Chief paramedic 3 | 477 |
| Professional 1 | 801 |
| Professional 2 | 838 |
| Professional 3 | 876 |
| Chief professional 1 (4 hours/day) | 457 |
| Chief professional 1 (6 hours/day) | 685 |
| Chief professional 2 | 951 |
| Chief professional 3 | 1270 |

Source: modified from (Ayapán, 2012)

Physician's salaries vary when taking into account specialists as well as income earned through the private sector. The following table shows the wide range of variation obtained through a survey carried out in 2005 by the Guatemalan Medical Association (*Colegio de Médicos de Guatemala*) in a non-representative sample of 843 physicians.

TABLE 11. AVERAGE FAMILY MONTHLY INCOME AMONG A SAMPLE OF GUATEMALAN PHYSICIANS, US$ (2005)

| Monthly Income | # of physicians | % |
|---|---|---|
| Less than $641 | 102 | 12 |
| $641 to $1265 | 324 | 38 |
| $1265 to $1900 | 195 | 23 |
| $1900 to $2500 | 93 | 11 |
| More than $2500 | 129 | 15 |
| Total | 843 | 100 |

Source: modified from (Ayapán, 2012)

Monthly income for nurses is much lower than for physicians, with 22% of nurses receiving less than the minimum wage of $190. Extremely low paid nurses comprise more than one quarter of those nurses working for the private sector or public institutions other than the Ministry of Health (MSPAS) or the Social Security Institute (IGSS). Also, about 90% of nurses earn less than the $450 estimated for covering the basic human needs. Among those earning more than $500 per month the majority work two or three jobs. In general terms, wages are markedly lower in the private sector (including other governmental institutions) and a little higher in the Social Security Institute (MSPAS, 2009b).

TABLE 12. AVERAGE MONTHLY INCOME AMONG A SAMPLE OF GUATEMALAN NURSES, US$ (2009)

| Monthly Income | % of nurses (total) | MSPAS | IGSS | Other (including private) |
|---|---|---|---|---|
| Less than $63 | 13 | 11 | 12 | 12 |
| $63–$188 | 9 | 9 | 0 | 26 |
| $188–$313 | 35 | 39 | 23 | 41 |
| $313–$438 | 32 | 29 | 55 | 12 |
| $438–$563 | 4 | 5 | 5 | 3 |
| $563–$688 | 3 | 4 | 3 | 2 |
| $688–$1063 | 2 | 2 | 2 | 2 |
| Total | 100 | 100 | 100 | 100 |

Source: modified from (MSPAS, 2009b)

## Health worker training

Between 250 and 400 new physicians have graduated each year between 1985 and 2009 according to data from schools of medicine (Ayapán, 2012) and the Guatemalan Medical Association (*Colegio de Médicos de Guatemala*)(Estrada, 2008). Although almost 90% graduate from the University of San Carlos (the more than 300-hundred years-old public university), a growing proportion graduates from recently created private schools of medicine at the Landívar and Mariano Gálvez Universities, in addition to the almost 50-years old Francisco Marroquín University (Ayapán, 2012; Estrada, 2008). Starting in 2000, there have been cohorts of students getting their medical education at the Latin American School of Medicine (ELAM, *Escuela Latinoamericana de Medicina)* in Cuba where, between 2005 (ELAM's first graduation)

and 2012, more than 650 Guatemalans have earned their medical degree (ELAM, 2012).

Nurse training in Guatemala shows more variation as can be inferred from the table below. The vast majority of nurse training is done through nursing schools located in Guatemala City, Quetzaltenango and Cobán, which are associated with the Ministry of Health (MSPAS) through the National School of Nursing (*Escuela Nacional de Enfermeras*), founded in 1956, where most nurse aides and nurse technicians are trained. Nurse aide training started in 1965. Beginning in 2001, an alliance between the National School of Nursing and the University of San Carlos created the career of nurse litentiate, with the goal of improving the technical level of nurses throughout the country. Likewise, private universities started to train nurse technicians and nurse litentiates in 2001 (Rafael Landívar University) and 2004 (Mariano Gálvez University) (Estrada, 2008; MSPAS, 2009b). Some private hospitals and IGSS (social security institute) train nurse aides and nurse technicians, but usually they can only work in the network where they were trained (Estrada, 2008).

TABLE 13. TYPES OF NURSES BY LEVEL OF EDUCATION AND YEARS OF TRAINING (2009)

| Types of nurses | Level of education | Years of training | # of nurses | % |
|---|---|---|---|---|
| Nurse aide, short training, not-authorized by MSPAS | Secondary | <1 | 273 | 2.2 |
| Hospital nurse help, not-authorized by MSPAS (*ayudante de hospital*) | Secondary | <1 | 172 | 1.4 |
| Nurse aide, not-authorized by MSPAS (*auxiliar de enfermería*) | Secondary | 1 | 1,507 | 12.1 |
| Nurse aide, authorized by MSPAS (*auxiliar de enfermería*) | Secondary | 1 | 8,027 | 64.5 |
| Nurse technicians (*enfermeras graduadas a nivel técnico professional*) | Higher | 3 | 2,061 | 16.5 |
| Nurse litentiate (*licenciada en enfermería*) | Higher | 5 | 209 | 1.7 |
| Other higher education degrees (not necessarily in nursing) | Higher | 5+ | 203 | 1.6 |

Source: modified from (MSPAS, 2009b)

Available data shows that, between 1997 and 2006, between one thousand and 1,300 nurse aides graduated each year from the different training institutions (Ayapán, 2012), with two noteworthy patterns. First, the total number of graduated nurse aides decreased over the period. Second, the number of those graduated from the National School of Nursing increased while the number of those graduating from private schools markedly decreased. For the same period, the number of nurse technicians increased from between 100 and 150 nurses per year to between 200 and 300 per year. The number and proportion of nurse technicians graduating from the National School of Nursing has decreased since 2001, when private universities started offering degrees in nursing, and by 2006 represented about half of the total number of graduating nurse technicians (Ayapán, 2012).

The largest employer for health care personnel is the Ministry of Health, followed by IGSS, as the table below shows. Available data from the National Statistics Institute (INE) shows that the number of private physicians is proportionally higher than that of physicians working for the public sector, when compared to the number of nurses. The accuracy of this data is unknown (although it comes from official sources), especially because it does not account for physicians and nurses who are simultaneously employed in the public and the private sectors.

TABLE 14. TYPE OF HEALTH CARE PERSONNEL BY EMPLOYER

| | MSPAS (2009)* | IGSS (2009)* | Private sector (2004)^ |
|---|---|---|---|
| Nurse aides | 7,602 | 4,872 | 1,192 |
| Nurse technicians | 1,638 | | 211 |
| Physicians | 2,120 | 1,360 | 1,308 |

Sources: *: modified from (Ayapán, 2012); ^: modified from (Estrada, 2008)

## 2.2 Guatemala's Public Health Care Sub-system

### 2.2.1 Ministry of Health (MSPAS)

The Ministry of Health (*Ministerio de Salud Pública y Asistencia Social*, MSPAS) covers about 70% of Guatemala's total population (PAHO, 2007), with almost 1,500 health care facilities including the first, second, and third levels of care (MSPAS, 2012). As shown in

Table 15, 74% of facilities are part of the first level of care, including health posts (some of which have been strengthened with services over the weekend, hence "strengthened health posts"), and minimal care units. Second level facilities constitute 23% of the total and include health centers, permanent health care centers (24-hour, 7-day service delivery), ambulatory care centers, mother and child comprehensive care centers, emergency centers, local maternity wards, peripheral clinics, and specialized services. Second level facilities have a total of 1,200 beds used mainly for birth delivery. The third level of care includes local, regional, and national-reference hospitals, which together add up to 3% of total facilities. Third level facilities include a total of 45 hospitals and 7,718 beds (MSPAS, 2012). In addition, MSPAS funds and offers technical coordination to non-governmental organizations carrying on the Program for Extending Coverage (PEC), totalling 4,618 "*centros de convergencia*" (community health houses) distributed in 415 jurisdictions (MSPAS, 2012). PEC utilizes non-MSPAS infrastructure and, generally speaking, these facilities do not meet any firmly established quality or sanitation requirements. Although with variation, PEC's personnel visits rural communities once a month and offer a package of minimal-essential interventions, defined by MSPAS, that include maternal and child services. During 2011, MSPAS gave a total of almost 16 million consultations, or 49.6% of the total consultations given by the public and private sectors during that year, which combined represent an estimated total of 31,829,903 consultations (MSPAS, 2012).

TABLE 15. HEALTH CARE FACILITIES, MINISTRY OF HEALTH (2012)

| Level of health care | Types of health care facilities | Quantity |
|---|---|---|
| First level | TOTAL | 1,101 |
| | Health posts | 777 |
| | Health posts, strengthened weekends | 245 |
| | Health posts, strengthened | 64 |
| | Minimal units | 15 |
| Second level | TOTAL | 346 |
| | Permanent care centers | 180 |
| | Health centers | 110 |
| | Ambulatory care centers | 40 |
| | Maternal and child comprehensive care centers | 5 |
| | Cantonal maternity wards | 4 |
| | Medical urgencies centers | 3 |
| | Peripheral clinics | 2 |
| | Specialized centers | 2 |
| Tertiary level | TOTAL | 45 |
| | District hospitals | 13 |
| | Departmental hospitals | 10 |
| | Regional hospitals | 13 |
| | National reference hospitals | 9 |
| Grand total, MSPAS, health care facilities | | 1,492 |

Source: modified from (MSPAS, 2012)

MSPAS is funded primarily through the Guatemalan government budget via tax revenues, although it also uses some international loans and aid. There is little to no fee-for-services, at least formally established, although it is not infrequent for patients to purchase needed pharmaceuticals or equipment that are not available in the facilities when they need them. MSPAS offers health coverage to anyone who requires its services, regardless of citizenship or insurance status. MSPAS services are free of charge, and they are overwhelmingly focused on mother and child services and

responding to general morbidity. MSPAS represents 40% of public health expenditures, which in turn represent 37% of total health expenditures, which in 2010 represented 7.1% of the country's GDP (Becerril and López, 2011).

### 2.2.2 Workers' social security (IGSS)

The *Instituto Guatemalteco de Seguridad Social* (IGSS) covers 17% of the population with a formal job (MSPAS, 2012). IGSS is a public, semi-autonomous institution funded through contributions from the affiliated employees, their employers, and the Guatemalan state via tax revenues. It offers healthcare coverage to affiliated workers, their spouses (only maternity-related services, if that is the case), and children less than five years of age. However, there are multiple limitations for effectively accessing IGSS's services. IGSS only affiliates workers through their private or public employers, leaving out the possibility for small businesses or independent workers to be affiliated. The geographic distribution of IGSS's facilities also poses a barrier because their facilities tend to be concentrated in the larger cities, and because the only program that is offered in all of Guatemala's 22 departments (equivalent to county level in the U.S.A.) is emergency services (usually related to car accidents or work-related accidents). For instance, their maternity program is only offered in 19 departments.

IGSS is organized through three main programs. First, the IVS program (Invalidez, Vejez y Sobrevivencia, or the program for people with disabilities, old age and workers' survivors) is a pension program offered to those who, having participated in the system for a set number of contributions, become disabled or retire, and in case of death of the affiliated worker, a person goes to his or her widow and under-age children. Second, the *Accidentes* program (emergencies in case of accident) is offered through a network of services (clinics and hospitals) located in most cities and large towns. Finally, the *Maternidad* program (maternity) offers prenatal, birth, and postnatal services, as well as converage to children of the affiliated worker. Additionally IGSS offers medical services and rehabilitation services, including general and specialty surgery, as well as dental services. Employees' and employers' contributions vary according to availability of the three programs in a given department (country level), ranging from 2.83% to 4.83% of the salary for employees, and from 6.67% to 15.5% of each employees' salary for employers

(Becerril and Lopez, 2011). As shown in Table 16, IGSS has a network of more than one hundred facilities, of which one fifth are hospitals.

TABLE 16. HEALTH CARE FACILITIES, IGSS (2012)

| Types of health care facilities | Quantity |
|---|---|
| Hospitals | 23 |
| Polyclinics | 1 |
| Consultation facilities | 36 |
| Health care centers | 4 |
| Care units | 2 |
| Comprehensive adscription units | 44 |
| Annex rooms | 2 |
| Peripheral units | 2 |
| First aid posts | 11 |
| Grand total, IGSS, health care facilities | 125 |

Source: modified from (MSPAS, 2012)

## 2.3 Key Public Health System Challenges

The most recent comprehensive analysis of Guatemala's health system (Estrada, 2008) identifies four fundamental challenges the system is facing: tackling health inequalities, building an inclusive health care system, reverting the tendency of decreasing public health expenditure/increasing private out-of-pocket health expenditure, and investing in social protection systems (Flores, 2008). These challenges are enhanced when considering the epidemiological transition characterized by an increase in addictions, mental health, and chronic diseases (Chávez, 2013).

## 2.4 Guatemala's Private Health Care Sub-system

Guatemala's private health sector is highly unregulated and fragmented; 86% of it is funded through out-of-pocket payments, with 14% covered through private insurance companies, often through individual contracts, but sometimes through their employers. More than 90% of those with private health insurance are part of the top 10% highest income earners (Becerril and López, 2011). There is a not-for-profit private sub-sector, which includes a variety of non-governmental-organizations (NGOs), with a large presence in rural areas. These NGOs often combine healthcare provision with work on education or economic development, and their source of funding may combine fees-for-services, donations, grants, or sponsorship programs.

There is also a for-profit sub-sector, with a higher presence in cities and, the highest by far in Guatemala City. As shown in Table 17, there is a wide variety of private health care facilities.

TABLE 17. HEALTH CARE REGISTERED FACILITIES, PRIVATE SUB-SYSTEM

| | Types of health care facilities | Quantity |
|---|---|---|
| 1 | Medical clinics, general practice | 1,450 |
| 2 | Medical clinics, specialties | 1,948 |
| 3 | Health houses | 18 |
| 4 | Dental clinics | 978 |
| 5 | Eye clinics | 306 |
| 6 | Aesthetics and weigh control centers | 65 |
| 7 | Child care centers | 144 |
| 8 | Elderly care centers | 48 |
| 9 | Alternative medicine centers | 151 |
| 10 | Addiction care centers | 46 |
| 11 | Image diagnosis centers | 147 |
| 12 | Ambulatory hospitals | 32 |
| 13 | Hospitals | 71 |
| 14 | Mental health care centers | 3 |

| | | |
|---|---|---|
| 15 | Temporary homes | 1 |
| 16 | Dental laboratories | 115 |
| 17 | Pathology and cytology laboratories | 39 |
| 18 | Sanatoriums | 112 |
| 19 | Pre-hospital care centers | 22 |
| 20 | Psychology clinics | 131 |
| 21 | Nutrition clinics | 54 |
| 22 | Blood banks | 19 |
| 23 | Dialysis and haemodialysis centers | 19 |
| 24 | Clinical laboratory, basic | 35 |
| 25 | Clinical laboratory, intermediate | 569 |
| 26 | Clinical laboratory, advanced | 139 |
| 27 | Clinical laboratory, specialized | 63 |
| 28 | Gymnasiums | 150 |
| 29 | Physical therapy and rehabilitation centers | 58 |
| 30 | Shelter and protection centers | 29 |
| 31 | Nutritional recovery centers | 1 |
| | Grand total, Private, health care facilities | 6,963 |

Source: modified from (MSPAS, 2012)

Guatemala's health accounts show that the total health expenditure is very low, with the majority coming from private out-of-pocket payments, as shown in Table 18.

TABLE 18. HEALTH ACCOUNTS, GUATEMALA

| Indicator | 1987 | 1998 | 2002 | 2003 | 2004 | 2006 |
|---|---|---|---|---|---|---|
| External resources for health (% of total expenditure on health) | 18.34 | 18.65 | 18.96 | 20.67 | 20.9 | 18.46 |
| Out-of-pocket health expenditure (% of total expenditure on health) | 61.96 | 59.67 | 62.37 | 59.02 | 57.54 | 60.26 |
| Out-of-pocket health expenditure (% of private expenditure on health) | 46.73 | 44.83 | 45.95 | 41.2 | 40.52 | 44.92 |
| Health expenditure per capita (current US$) | 1 | 1.02 | 0.36 | 0.49 | 0.37 | 1.06 |
| Health expenditure per capita, PPP (constant 2005 international $) | 2.76 | 3.14 | 1.68 | 2 | 2.08 | 3.08 |
| Health expenditure, private (% of total health expenditure) | 70.17 | 30.06 | 39.56 | 34.37 | 39.19 | 26.33 |
| Health expenditure, private (% of GDP) | 52.26 | 16.23 | 25.75 | 22.56 | 24.43 | 13.53 |
| Health expenditure, public (% of total health expenditure) | 39.46 | 12.08 | 21.2 | 18.06 | 20.16 | 10.47 |
| Health expenditure, public (% of government expenditure) | 25.87 | 5.37 | 14.39 | 11.72 | 13.18 | 4.72 |
| Health expenditure, public (% of GDP) | 58.26 | 55.8 | 59.19 | 56.08 | 54.5 | 55.89 |

Source: (World Bank, n.d.)

# 3. THE EMERGENCE OF MEDICAL TOURISM IN GUATEMALA

According to many commercial medical tourism websites, medical tourism has taken place in Guatemala for several years[1], but not in any organized manner. Compared to other Central American locations, Guatemala is relatively new to advertising medical services internationally (SurgeryPlanet, 2010). However, in the past two years private hospitals, hotels, airlines, individual professionals, and other private companies have joined together to form a formal network, the Guatemalan Exporters Association (or AGEXPORT) to allow for better organization in exporting health services (Personal communication, 2011)[2]. According to local informants, the network has a strategic plan and its members have been participating in tourism fairs (Personal communication, 2011). The medical tourism industry in Guatemala is also connected to the Guatemalan Institute of Tourism (INGUAT) which advertises health tourism on its website[3]. These businesses connected to the medical tourism industry have also become members of the American/Guatemala Chamber of Commerce, a U.S. based organization with branches in other countries. In the organized medical tourism network there are 25 hospitals which include large hospitals, dental clinics and plastic surgery clinics. Each hospital keeps information on the amount of business they conduct in medical tourism.

The growing medical tourism industry in Guatemala has received support from the country's former Vice President, including public funding for AGEXPORT's activities involving medical tourism. This support may be tied in part to the fact that the former Vice President, Dr. José Rafael Espada, is a cardiologist who practiced for over 25 years in the US prior to returning to Guatemala. When the current government came into power, the Vice-President proposed the idea of reducing the deficit of public hospitals by "leasing" hospitals' infrastructure and equipment to private

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1 For example, see http://www.agmfutbol.org/rl/divisions/meturgua/

2 See http://www.healthwellnessguatemala.com/Portal/Home.aspx?secid=1387

3 See http://www.visitguatemala.com/web/index.php?option=com_content&task=view&id=257&Itemid=769

companies. There was reportedly a great deal of opposition to this plan, and it was not pursued (Personal Communication, January 2011).

Key activities that are planned for medical tourism over the next few years include getting international accreditation for hospitals in the country and starting a bilingual nursing school (Personal communication, January 2011)[4]. At the moment, medical tourism has no association with the Ministry of Health. It is seen as an export and the only governmental relationship at present is with the Ministry of Tourism.

Advertising and information about Guatemala as a medical tourism destination is widely available on the internet, including information from brokers targeting travel to Guatemala. For example, Medical Tourism Guatemala, a medical tourism broker, advertises that international patients will pay the same prices locals pay, for services including transportation, accommodation, or medical procedures (Medical Tourism Guatemala, 2009). They also advertise a favourable exchange rate, skilled professionals, first class medical facilities and spas, moderate climate, beautiful scenery and easy access from the U.S. by air (Medical Tourism Guatemala, 2009). Medical Tourism Guatemala is owned by a founding member of Guatemala's Health and Wellness Tourism Commission, described as an "ethical non-profit organization of Guatemala's Exporters Association" (Medical Tourism Guatemala, 2009). This facilitator has connections for various medical procedures, dental care and stem cell transplants (MedicalTourism.com, 2011). Other medical facility networks, such as SurgeryPlanet, encourage prospective patients to contact the SurgeryPlanet Professional Medical Case Managers to access details about services, specializations, doctor resumes, accreditation and success rates (SurgeryPlanet, 2010). The most common medical procedures sought by medical tourists in Guatemala include cosmetic, oncology, bariatric, fertility, orthopaedic, urology, dermatology and dental (MedicalTourism.com, 2011). For example, the Centro Procrea offers fertility

[4] See also, for example Renee Marie Stephano in collaboration with Vivian Ho (2008) The rise of global healthcare from Latin America. September 9. Retrieved January 31, 2011. http://www.medicaltourismmag.com/issue-article/the-rise-of- global-healthcare-from-latin-america.html, and http://www.export.com.gt/Portal/Home.aspx/Artes%20por%20hacer/urgente/port.com.gt/Portal/ESCUELA/Julio/Entities/Artes%20por%20hacer/urgente/port.com.gt/Portal/ESCUELA/Julio/Entities/Home.aspx?secid=1446

treatments for medical tourists; their English language website clearly targets patients from abroad and especially the US[5].

## 3.1. Historical health care to returning migrants, expatriates and cross-border patients (1970 to present)

Historical migration trends have impacted cross-border care in Guatemala. Anecdotal information from medical tourism healthcare providers points to the 1970's and 1980's as the beginning of noticeable cross-border healthcare, which happened in different ways. On the one hand, the increasing numbers of Guatemalans living in the U.S.A. from very early on created a category of patient who is from Guatemala, lives abroad, but visits Guatemala for medical and dental procedures. On the other hand, the size of the medical industry in Guatemala is comparatively larger than that of Southern Mexico, El Salvador, and Honduras, which has influenced the existence of patients from those countries who have found it convenient to travel to Guatemala City and Quetzaltenango for medical and dental procedures. Additionally, the demand of healthcare by expatriates from the U.S.A. and other countries has created doctor-patient relationships as well as referrals of other patients from abroad. Finally, the increasing number of Guatemalan physicians who pursue training in a variety of medical specialties in other countries has created a network of referrals and counter-referrals based on doctor-doctor, doctor-patient, and patient-patient relationships. All of these trends seem to have been increasing in the last twenty years and, more perceivably, in the last ten years.

## 3.2 Efforts at promoting Guatemala as a medical tourism destination (2008 to present)

Different organized efforts aimed at promoting medical tourism in Guatemala began in 2008 with the instrumental role of the country's then-Vice-President, Dr. Rafael Espada, but also influenced by the perception in the business community (fuelled by international development organizations and financial institutions, and by the relative success of the call-center industry in Guatemala) that the economic future of

[5] See http://fertility-clinic-guatemala.angelsabroad.com/ .

countries such as Guatemala is in the development of the service sector. These efforts were initially led by INGUAT, the governmental agency in charge of tourism, but sparked the interest of AGEXPORT (the business association of exporters) and AmCham (the Guatemalan-American Chamber of Commerce), each of whom created in 2009 a medical tourism commission within its structure. These two commissions have played several roles in these years, providing leadership and structure to private parties interested in the business of medical tourism, while at the same time serving as interlocutors to relevant governmental agencies. In more subtle and perhaps less organized ways, these commissions have also played the role of promoters of medical tourism and, as such, lobbyists for the interest of the medical tourism industry. These efforts have lacked stability, partly due to unclear governmental policies, and partly due to divisions among AmCham's and AGEXPORT's medical tourism commission members which translates into unclear goals for the industry.

# 4. EXISTING MEDICAL TOURISM SITES IN GUATEMALA

At the moment, Guatemala does not have any medical tourism sites per se, and available data does not show any plans for undertaking such an effort. However, one interviewee mentioned that in 2009 a group of Guatemalan investors considered the possibility of building a medical tourism complex near Antigua, Guatemala, but it was abandoned in the early stages because it was considered to be economically unsustainable, and the investors developed a luxury resort instead. Similarly, one of the projects presented in the Guatemala Investment Summit (March 2013) was for developing a hotel complex focused on wellness, including a spa, to be built in San Vicente Pacaya.

Similarly, none of the health care facilities identified, shown in Table 19, focus primarily on medical tourism, nor do they have medical tourists as an important proportion of their patients.

TABLE 19. MAIN MEDICAL TOURISM FACILITIES IN GUATEMALA CITY

| Name | Foci |
|---|---|
| CENTRO DE RADIOTERAPIA HOPE INTERNATIONAL | Cancer radiotherapy |
| CENTRO DE REPRODUCCION HUMANA, S.A. | Fertility |
| CENTRO DENTAL DE ESPECIALISTAS, S.A. | Dental |
| CLINICA DENTAL DONADO | Dental |
| HOSPITAL CENTRO MEDICO | Hospital, multiple specialties |
| HOSPITAL HERRERA LLERANDI | Hospital, multiple specialties |
| HOSPITAL NUESTRA SEÑORA DEL PILAR | Hospital, multiple specialties |
| HOSPITAL PRIVADO HERMANO PEDRO | Hospital, multiple specialties |
| NOVAESTHETICS | Plastic surgery |
| SERVICIOS DENTALES INTEGRADOS / SEDI | Dental |
| SERVICIOS OFTALMOLOGICOS ASOCIADOS, S.A./ VISION INTEGRAL GUATEMALA | Ophthalmology |
| CENTRO CLINICO INTEGRAL ROPHI/ CIR | Clinic, multiple specialties |
| CENTRO ENDOSCOPICO INTERVENCIONISTA, S.A. | Endoscopy / surgery |
| GANDDINI DENTAL | Dental |
| SMILE FACTORY | Dental |
| ORTOTAL | Orthopaedics |
| HOSPITAL AMBULATORIO MULTIMEDICA | Hospital, multiple specialties |

# 5. FUTURE MEDICAL TOURISM PLANS

As of May 2013, there was an effort at integrating a group for the promotion of medical tourism ("mesa técnica para la promoción del turismo médico") with the participation of the identified key actors: INGUAT, AGEXPORT's medical tourism commission, AmCham's medical tourism commission, Quetzaltenango's medical tourism association, and Sacatepéquez's medical tourism association (Sacatepéquez is the *departamento* [equivalent to county level] of which Antigua, Guatemala is the capital city). The goal of this group would be to combine the individual efforts of each of its members.

AGEXPORT and Stop-Loss Brokerage have a mutual agreement to promote a Latin American Preferred Health Plan, which includes an option for employees of US Corporations to travel to Guatemala for medical/surgical procedures, with no deductible, out of pocket costs or co-payments. INGUAT is planning to assign 400,000 *quetzales* (approximately US$50,000) out of its budget for the promotion of medical tourism. INGUAT is also working on a partnership with the Guatemalan bank G&T Continental, which has seven branches in Los Angeles, California. Through this partnership, the bank will offer "medical remittances" to its L.A. clientele, with the purpose of facilitating the payment of doctors by Guatemalans living in the U.S.A., for treatments they are financing for their relatives who live in Guatemala (García, 2013). AmCham's medical tourism commission received free airfare in 2011 and 2012 from United Airlines, which has been used for bringing "medical promoters" from Miami and Houston to Guatemala to have them visit the medical tourism facilities and associated accommodations. Amcham is planning to repeat this experience in 2013. *Grupo Vanguard International* is planning to offer medical services to Guatemalans living in Miami through an initiative they call "Guatesana", and they are also working on promoting medical tourism through the Guatemalan consulates in the U.S.A. (García, 2013). Quetzaltenango's medical tourism association is partnering with the municipality of Tapachula (in Chiapas, Mexico), in offering bus service to groups of patients traveling for medical treatments (García, 2013).

Available information shows that there are no big plans aimed at creating medical tourism destinations as such, and we have not identified any sizeable investments in the medical tourism industry either by local or foreign investors, or by private or public funders.

# 6. CONCLUSION

Guatemala's medical tourism industry is in its "embryonic phase", as one of its promoters told us in a conversation in March 2013. Although some private clinics and hospitals are profiting from cross-border care in different forms, medical tourism is far from representing the majority of their profit, or even a sizeable proportion of their patients. The different groups promoting medical tourism are still weighing the potential for a joint strategy that to this date still does not exist. Government involvement is minimal at this point and available information does not show plans for any big investments.

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# APPENDIX 1 – CONTENT ANALYSIS OF MEDIA COVERAGE OF MEDICAL TOURISM IN GUATEMALA

This analysis includes articles from four newspapers (Prensa Libre, Siglo 21, El Periódico, and La Hora), and four business/economy-specialized periodicals (Revista Summa, El Economista, Data Export, and Estrategia y Negocios). Key word searches ("turismo medico", "turismo salud", "turismo bienestar", "paciente internacional", "paciente extranjero", "turista medico", and "turista salud") or library searches did not retrieve any original articles from the other five newspapers (Diario de Centroamérica, Al Día, Nuestro Diario, El Quetzalteco, and El Metropolitano), eight specialized periodicals (América Economía, Revista Ser Gerente, Revista Enfoque, Revista C4, Revista Industria y Negocios, Laissez-Faire, Revista ASIES, and Revista Panorama) and six online-only news/analysis outlets (The Guatemala Times, Noticias de Guatemala, La Voz del Migrante, CERIGUA, Incidencia Democrática, and Plaza Pública). We used our own general knowledge and previous experience performing media analysis in Guatemala for the identification of newspapers and news outlets, which we confirmed through internet searches using the keywords "Guatemala newspapers" and "Guatemala noticias". We also asked people involved in medical tourism about newspaper publications on the topic. For the identification of business/economy specialized periodicals, we asked informants involved in tourism, commerce, and business, which are the most common news sources among their peers. Finally, we used the online library catalogs of four universities (San Carlos, Francisco Marroquin, Rafael Landívar, and Del Valle) for the identification of periodicals of potential relevance.

We initially identified sixty-six articles but further analysis showed that twenty two of them were only citations of other articles, in all cases specialized periodicals citing newspaper articles with no additional analysis or information. We excluded another three articles because they were originally published before August of 2007. The following table shows the sources of the forty-one articles we ended up including in this analysis.

| Media outlet | Number of articles |
|---|---|
| Prensa Libre | 14 |
| El Periódico | 12 |
| Siglo 21 | 6 |
| La Hora | 3 |
| Revista Summa | 2 |
| El Economista | 2 |
| Revista Economía y Negocios | 1 |
| Revista Export | 1 |
| TOTAL | 41 |

We classified each article according to its relevance to the study using the following three criteria: 1. If the article's main focus is on medical tourism; 2. If the article talks explicitly about relevant actors' involvement with medical tourism in terms of their statements, facilities, institutions, actions, or plans; and 3. If the article is detailed and specific. The following table shows the number of articles we classified in each category. It was hard to assess the third criterion and we acknowledge that several articles classified as "somehow relevant" could very well be classified as "most relevant" attending to this difficulty. However, the level of detail in the seven articles classified as "most relevant" was clearly superior to that of those labelled "somehow relevant".

| Classification | criteria | | | Number of articles |
|---|---|---|---|---|
| | 1. Focus | 2. Explicit | 3. Detailed | |
| Most relevant | + | + | + | 7 |
| Somehow relevant | + | + | - | 25 |
| Least relevant | - | + | - | 4 |
| | - | - | + | 5 |
| | | | TOTAL | 41 |

In terms of media coverage, a clear pattern seems to emerge when we ask what drives the news flow and what are the sources of such news. Twenty articles have been published following press releases by the Guatemalan Association of Non-Traditional Exporters (AGEXPORT, formerly known as AGEXPRONT), producing four 'news sprouts' throughout the period examined. The first of such sprouts began in September of 2007, when AGEXPORT's Health and Wellbeing Tourism Commission (CTSB, Comisión de Turismo de Salud y Bienestar) was created (Estrada Tobar 2007, Bolaños 2007a, Bolaños 2007b, Quinto 2007, Hurtado 2007). The second sprout was in February of 2011, when the CTSB launched its strategy for development of medical tourism (Dardón 2011a, Dardón 2011b, Maldonado 2011a, Maldonado 2011b, Prensa Libre 2011a), and was followed by a third sprout in November of 2011 when the CTSB re-launched its strategy with a focus on the creation of a medical tourism district in Guatemala City, called "Ciudad Salud" (Health City) and the endorsement of the city's Mayor (Bolaños 2011a, Bolaños 2011b, Dardón 2011c, González 2012, Prensa Libre 2011b, and Siglo 21 2011). The fourth sprout was in January of 2012, after the CTSB released information on its 2012 projections on medical tourists and job creation (Ancheyta 2012, El Economista 2012, Masaya 2012). A fifth sprout of different characteristics (it was not triggered by CTSB's press releases, for instance) and smaller than the rest began in February of 2009, with articles focusing on medical tourism in Central America (El Economista 2009, La Hora 2009, Portillo Guzmán 2009), but we are not sure of what triggered this sprout. In terms of sources of information, thirty seven articles cite information or quote representatives of AGEXPORT's CTSB and, more importantly, there is not a single article citing information on medical tourism in Guatemala from other sources.

The CTSB emerges from this content analysis as the main source and driving force behind the medical tourism information that circulates in Guatemalan media outlets. This finding, along with the fact that there are almost no opinion/editorial articles (only 4 out of 41 articles), almost no in-depth reports (3 out of 41), and not a single piece of investigative reporting, shapes what is said and what is not said about medical tourism in the country. All 41 articles showed a positive attitude towards medical tourism.

The image of medical tourism in Guatemala emerging from media coverage is one of independent entrepreneurs (most of them physicians or dentists) who are so

well qualified in what they do (because they got their specialties in highly competitive markets and because they offer last generation technological advances in their clinics and hospitals) that they have been treating foreign patients for several decades, and now want to work in an organized/collective way in order to transform the country into a medical tourism destination, which will have a tremendous impact in terms of job creation and sustainable development. These doctor-entrepreneurs, the media image would go on to say, can compete in quality of care with any physician in any country (although they do not have formal accreditations to prove it, yet). High quality physicians and the availability of technologies are the main strengths on which medical tourism can be developed as a flourishing industry, and the insufficient quantity of bilingual nurses is the only limitation they have, the image goes on. These entrepreneurs have built partnerships with government agencies within the Ministry of Economy, the Tourism Institute, and the Municipality of Guatemala City but it is unclear what such partnerships entail. They have also built alliances with national and international promoters of medical tourism, with tourism facilitators, and with hospitals in North America and Europe. The Ministry of Health is absent from this image (only one article vaguely mentions it) and there is no discussion in terms of health policy or health systems, just as there is no discussion of the political economy of medical tourism in Guatemala.

From a health equity perspective, media coverage does not shed light on the potential impacts of medical tourism on inequities in health, but it makes clear that the foundations of medical tourism in Guatemala are tightly intertwined with the health inequalities that historically have permeated the country's health system.

In the following sections we present an overview of the analysis of media coverage organized in the four health equity domains defined in the larger study: impacts on health human resources, government involvement in medical tourism, foreign investment, impacts of private health care, and impacts on public health care.

## Impacts on Health Human Resources

Only a few articles touch on human resources topics. According to AGEXPORT's Julio Donado, medical tourism will help increase tourism-related jobs from 2,869 in 2010 to 11,000 in 2015. According to him, one of Guatemala's main assets is the number

of Guatemalan physicians who fulfill "competitive standards" because they have studied in the "most demanding markets" and they speak English very well. However, if Guatemala is going to become a medical tourism destination, it is necessary to create the strategies and procedures for them to get international accreditation and this is something the country's industry does not have a strategy for (González 2012, see also Estrada 2010). To keep up with the projected demand, the CTSB foresees the need for a bilingual school for nurses (Estrada 2010, Hurtado 2007). There is no explicit mention about the characteristics of such a school in terms of public and private investments and accreditation.

AGEXPORT has also identified the need for training and development of human resources to prevent and address negligence, malpractice, and accidents (Hurtado 2007). No further details are offered in the articles.

## Government Involvement in Medical Tourism

Government involvement is not prominent in medical tourism media coverage, which may be due to the prominence of AGEXPORT's CTSB shaping media coverage, or due to a low priority of the topic in government's agenda, or both. Government relation to medical tourism may be synthesized in three themes: institutional support, need for legal reform and economic incentives, and obstacle for not fixing the country's violence problem. We will present these three themes in reverse order, and at the end will present a fourth theme, ministry of health regulation, prominent for its absence.

Several physicians or dentists who are members of the CTSB mentioned the country's high prevalence of violence as the main obstacle for the development of the medical tourism industry in Guatemala, and solving the problem of violence as the main contribution the industry expects from the government (see Villela 2008, for example).

Legal reform and economic incentives are only mentioned in a few articles, and none of them offers any details, but they give some ideas about the kind of interventions the medical tourism industry is expecting from the Guatemalan government. In terms of legal reform, there is something in the works in the National Congress's commissions of economy and tourism, but it is unclear what exactly that

may be (Estrada 2010), and AGEXPORT's members have expressed the need for creating a "law for the development of exportation of services" and one for "English language learning and perfecting", along with its corresponding program (González 2012). In terms of economic incentives, one of AGEXPORT's members expressed that medical tourism could be benefited by the Ley de Zonas Francas (free zones law) (Masaya 2012). One article mentions high travel taxes, high water costs, and high energy costs as obstacles the industry is facing and implies that the government could intervene by reducing these costs, although not offering any details (Villela 2008).

In terms of institutional support, it is clear that the Guatemalan Tourism Institute (INGUAT, a government agency of lower rank than a ministry or a secretary) was instrumental in the initial efforts for consolidating a core group of entrepreneurs interested in medical tourism (Bolaños 2007a, Bolaños 2007b, Estrada 2007, Hurtado 2007), as it was in promoting their participation in international fairs and conferences (Ancheyta 2012, Maldonado 2011). In addition to INGUAT, CTSB has received institutional support from different initiatives and programs within the ministry of economy, such as PRONACOM (national program for competitiveness), Conapex (national commission for exports), Invest in Guatemala, Pacit (a program that involves Guatemalan commercial attachés in other countries) (Estrada 2010, Maldonado 2011). There are no details offered in any of the articles as of what such institutional support may have implied. Finally, the municipality of Guatemala is supporting medical tourism in different ways: Mayor Álvaro Arzú stated he will "unconditionally support" medical tourism; the municipality recognized the existence of a 'health tourism circuit' in the city's zones 9, 10 and 15 (some add either zone 14 or 16); the municipality facilitated the creation of a promotional video, and it set up an office in the municipal building for medical tourism customer service (Ancheyta 2012, Gómez 2010, González 2012, Siglo 21 2011a, Siglo 21 2011b).

The absence of the Ministry of Health in all but one of the articles is an important finding and becomes more apparent in the context of two articles focusing on medical tourism in Central American countries, where the Costa Rican Ministry of Health's regulatory role is clearly mentioned, but there is no such mention in Guatemala's case (El Economista 2009, La Hora 2009). However, an article by AGEXPORT's competitiveness commissioner (Estrada 2010) points –just in passing– to

the need to work with the Ministry of Health. Although Estrada does not offer any details, it is clear that at AGEXPORT they have identified the Ministry of Health as an actor.

## Foreign Investment

Although several articles focus on medical tourism in Guatemala in terms of trends and projections (number of foreign patients, number of jobs, amounts of dollars brought by medical tourists) there is not a single article that gives details about investment and investors in general, and none talks about foreign investment. After reading the articles, the impression is that clinics and hospitals are following their own strategies, with no collective or publicly funded projects in sight. One article talks about how important investment in medical tourism has been in Guatemala in recent years, but does not give any details, giving the impression that it is all by private and local investors (El Economista 2009). For instance, Centro HOPE International (a radio therapy center) was conceived and built with international patients in mind, but it is portrayed as a physician's idea that was supported by some of his friends and relatives (Dardón 2009, Lima 2010, Ortiz 2010). Hospital Centro Médico recently opened a new building with heliport and luxury rooms, all of which is part of their strategy to attract medical tourists and to get international certification (Bolaños 2011b). Similarly, Hospital Multimédica is planning the construction of a new building with 60 rooms and 6 operating rooms (Bolaños 2011b). The other strategy seems to be to build partnerships and alliances with U.S. hospitals (Bolaños 2011b), but it is unclear if those alliances imply foreign investment as such, as suggested for the case of Panama (Oppenheimer 2008) or using a franchise model, as suggested by a Guatemalan consultant (Fernández 2011).

## Impacts on Private Health Care

The private sector is portrayed as the engine behind the growth of medical tourism in Guatemala. Articles do not talk about the impact that medical tourism may have on private health care, although some impacts can be identified from the articles. Hospitals and Clinics have been building alliances with hotels and wellness centers in order to offer more well-rounded packages to tourists (Bolaños 2011b) and they have been constructing new units or buildings (Bolaños 2011b, El Economista 2009,

Hurtado 2007). For instance, Hospital Centro Médico has alliances with Hotel Vista Real (tours to Antigua Guatemala, Volcán of Pacaya, and finca Filadelfia, and they want to integrate two golf courses), and they recently opened a new building with heliport and 8 stories of parking and luxury rooms. This is the general tone of the articles. In 2007, when INGUAT organized a health and wellness tourism meeting, there were over 90 private providers interested in offering their services through tourism packages, including dental centers, plastic surgery, diagnostic, laboratories, hospitals, saunas, spas, thermal waters, meditation centers, bioenergy and acupuncture, naturists, chiropractics, midwives, spiritual guides, medicinal plants providers, sleep clinics, obesity clinics, Mayan priests, car rental, medical insurance, taxis, and hotels (Hurtado 2007). Although there have been efforts to build alliances between these providers and to integrate dissimilar types of providers into the same effort (i.e. complementary/alternative/traditional medicine and biomedicine), hospitals and clinics seem to be the ones leading the efforts and getting most of the media coverage. There are recurrent and positive mentions of Hospital Centro Médico (Bolaños 2011b, Hurtado 2007), Hospital Herrera Llerandi (Palma 2008), Centro Dental de Especialidades (Bolaños 2011b, Hurtado 2007, Revista Summa 2011), Centro HOPE International (Dardón 2009, Lima 2010, Ortiz 2010), Centro Integral de Cirugía Plástica Renova (Bolaños 2011b), and Hospital Ambulatorio Multimédica (Bolaños 2011b, Hurtado 2007).

There is some mention of the need to get International Joint Commission's certifications (Bolaños 2011b, El Economista 2009, Estrada 2010, Palma 2008), but there are no details about this.

## Impacts on Public Health Care

This theme is completely absent from the articles examined in this analysis.

## Other Issues

The main focus of the majority of the articles is on projections of growth for the medical tourism sector in Guatemala (Bolaños 2011b, El Economista 2009, El Economista 2011, González 2012, Portillo 2009) and the strategies to promote Guatemala as a medical tourism destination (Ancheyta 2012, Bolaños 2011a, Bolaños

2011b, Dardón 2010, Dardón 2011a, Dardón 2011b, Dardón 2011c, Estrada 2010, González 2012, Hurtado 2007, Hurtado 2008, Larios 2012, Maldonado 2011a, Maldonado 2011b, Prensa Libre 2011a, Prensa Libre 2011b, Revista Summa 2011, Quinto 2007, Siglo 21 2011a, Siglo 21 2011b).

## Key Points

- Media coverage of medical tourism is largely driven by the nascent medical tourism industry and, therefore it is overwhelmingly positive.
- Health systems or health equity concerns have not been raised.
- Critical views are absent of media coverage.
- The large majority of articles focus on strategies for promoting Guatemala as a medical tourism destination.
- Medical tourism is largely presented as an industry with potential contributions to sustainable development, and that will create jobs. It is seen as part of the growing services industry (with call centers, software development, and the like).
- Public health and the Ministry of Health is not part of the medical tourism picture as it is presented.
- Medical tourism has received institutional support from different government agencies but it is not entirely clear what such support means.
- Foreign investors and investments have not been presented in media coverage.

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# APPENDIX 2 – SUMMARY OF KEY AGENCIES AND ACTORS INVOLVED IN MEDICAL TOURISM DEVELOPMENT IN GUATEMALA

## Medical Tourism Providers

From a provider perspective, key actors do not seem to be individual clinics or hospitals, but rather organizations founded with the purpose of lobbying and promoting medical tourism in Guatemala.

### *Comisión de Turismo de Salud, de AGEXPORT*

AGEXPORT is a private organization of business people promoting Guatemalan exports, especially what is referred to as non-traditional products, that is, none of the main products exported by Guatemala (coffee, sugar, banana, and other). AGEXPORT has been promoting the growth of the service sector in Guatemala and, as part of that effort, started the commission on health and wellness tourism in 2009, partly influenced by a perceived interest by the Guatemalan government in promoting this industry. The main focus of this commission seems to be to lobby the Guatemalan government (mainly the ministry of economy, and tourism agency) to facilitate the promotion of Guatemala as a medical tourism destination. As of May 2013, there were 23 members in this commission, including all of the providers listed in appendix 4, ten of which also are part of AmCHAM's medical tourism commission.

### *Comisión de Turismo Médico de AmCHAM*

The Guatemalan-American Chamber of Commerce is a private organization aimed at promoting commerce between Guatemalan and U.S. business. In 2009, they started a commission on medical tourism, in part influenced by outreach efforts by the Guatemalan government. The main focus of this commission seems to be to facilitate the establishment of partnerships between companies, although to a lesser extent it is also interested in influencing government support to this industry. As of May of

2013, there were 25 members in this commission, including all of the providers listed in appendix 4.

### *Asociación de Turismo Médico de Quetzaltenango*

Founded in 2011, it seems to be an actor of growing importance, although up to this point it is still unclear what their strategy is. Quetzaltenango is Guatemala's second largest city and it is located at less than 50 miles from the Mexican border. With roughly 30 members (in August 2012), most of them physicians with private practices and some hospitals, their focus is in trying to promote Quetzaltenango as a medical destination for people living in Southern Mexico.

### *Guatesana/Grupo Vanguard International*

This is an organization we only started to hear about in 2013. It seems to be small, founded by six physicians, with the brother of the current Guatemalan president being one of them. As far as we can tell, it has changed the dynamics of those promoting the medical tourism industry, and it is seen with both hope and suspicion, given the influence of Dr. Jaime Perez Molina.

## Government Ministries and Organizations

### *Instituto Guatemalteco de Turismo (INGUAT)*

Recognized by those involved in AGEXPORT's and AmCHAM's medical tourism commissions, INGUAT is the country's governmental tourism agency, which has been trying to promote the development of the tourist industry in general and, as part of it, that of medical tourism. It was through INGUAT that initial meetings on the topic were held between 2008 and 2009, which sparked the creation of AGEXPORT's and AmCHAM's medical tourism commissions. However, there has not been a clear policy or agenda guiding INGUAT's efforts, which have been limited to facilitating the inclusion of representatives of the medical tourism industry in government-sponsored business promotion trips to the U.S.A.

### *Programa Nacional de Competitividad, Ministerio de Economía (PRONACOM)*

PRONACON has supported efforts and improving "competivity", mainly through technical assistance. It has been mentioned by several of AGEXPORT's and AmCHAM's medical tourism commissions members, as one of the governmental agencies they have been working with, although with irregular intensity. The sense we get is that there is not a clear policy or strategy from PRONACON for promoting medical tourism.

### *Municipality of Guatemala City*

Although the City Mayor has not changed for the past 12 years, the Municipality of Guatemala was a clear supporter of medical tourism during the past presidential period, but has lowered its profile in the last couple of years, probably due to rivalry with the current national government. Prior to 2012, the Municipality funded the production of a promotional video and seemed supportive of the creation of a "medical tourism district" within the city limits, dubbed "Ciudad Salud".

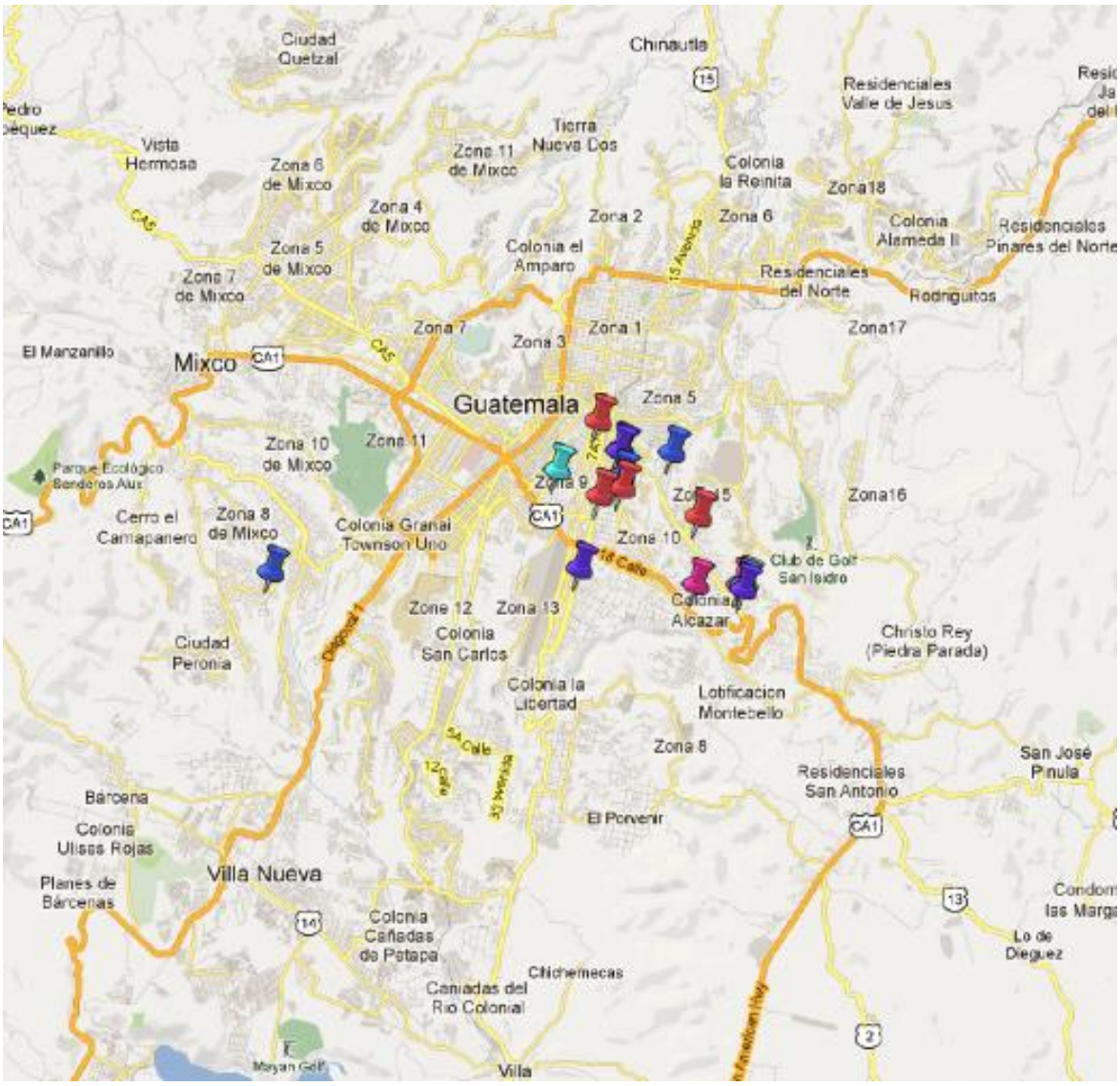
## Non-National Organizations

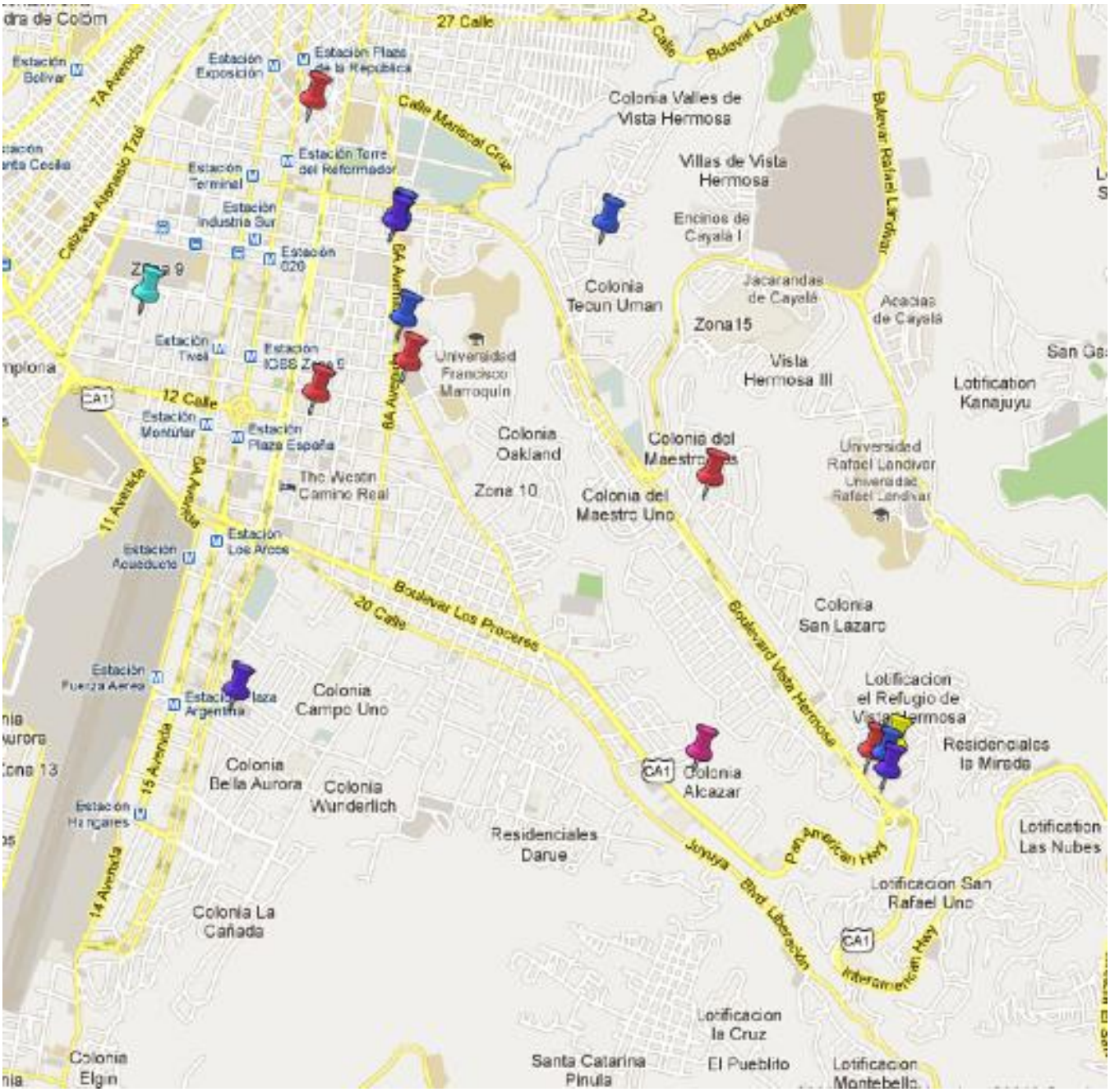
We have not clearly identified any "key" non-national organization.

## Foreign Investors

We have not yet identified any foreign investors.

# APPENDIX 3 – MAP OF FORMER, CURRENT, AND PLANNED MEDICAL TOURISM FACILITIES IN GUATEMALA


Ciudad Quetzal
Chinautla
Residenciales Valle de Jesus
Vista Hermosa
Zona 6 de Mixco
Zona 11 de Mixco
Tierra Nueva Dos
Colonia la Reinita
Zona18
Zona 4 de Mixco
Zona 2
Zona 6
Colonia Alameda II
Residenciales Pinares del Norte
Zona 5 de Mixco
Colonia el Amparo
Zona 7 de Mixco
Residenciales del Norte
Rodriguitos
Zona 7
Zona 3
Zona 1
Zona17
El Manzanillo
Mixco
CA1
CA9
Guatemala
Zona 5
Zona 10 de Mixco
Zona 11
Parque Ecológico Senderos Alux
Zona 9
Zona16
Cerro el Cantapanero
Zona 8 de Mixco
Colonia Granai Townson Uno
Zona 10
Club de Golf San Isidro
Zone 12
Zona 13
Colonia Alcazar
Ciudad Peronia
Colonia San Carlos
Christo Rey (Piedra Parada)
Colonia la Libertad
Lotificacion Montebello
Zona 8
San José Pinula
Residenciales San Antonio
Bárcena
El Porvenir
Colonia Ulises Rojas
Villa Nueva
Planes de Bárcenas
Colonia Cañadas de Petapa
Chichemecas
Cañadas del Río Colonial
Villa




Centro de Radioterapia Hope International [Cancer]

Centro de Reproducción Humana, S.A.

Centro Dental de Especialistas, S.A.

Clinica Dental Donado
Hospital Centro Médico
Hospital Herrera Llerandi
Hospital Nuestra Señora del Pilar
Hospital Privado Hermano Pedro
Novaesthetics
Servicios Dentales Integrados / SEDI
SERVICIOS OFTALMOLOGICOS ASOCIADOS, S.A./ VISION INTEGRAL GUATEMALA
Centro Clínico Integral ROPHI / CIR
Centro Endoscópica Intervencionista, S.A. [endoscopy, surgery]
Ganddini Dental
Smile Factory
Ortotal [Orthopaedics]
Hospital Multimédica

| Name | Foci |
|---|---|
| CENTRO DE RADIOTERAPIA HOPE INTERNATIONAL | Cancer radiotherapy |
| CENTRO DE REPRODUCCION HUMANA, S.A. | Fertility |
| CENTRO DENTAL DE ESPECIALISTAS, S.A. | Dental |
| CLINICA DENTAL DONADO | Dental |
| HOSPITAL CENTRO MEDICO | Hospital, multiple specialties |
| HOSPITAL HERRERA LLERANDI | Hospital, multiple specialties |
| HOSPITAL NUESTRA SEÑORA DEL PILAR | Hospital, multiple specialties |
| HOSPITAL PRIVADO HERMANO PEDRO | Hospital, multiple specialties |
| NOVAESTHETICS | Plastic surgery |
| SERVICIOS DENTALES INTEGRADOS / SEDI | Dental |

| | |
|---|---|
| SERVICIOS OFTALMOLOGICOS ASOCIADOS, S.A./ VISION INTEGRAL GUATEMALA | Ophthalmology |
| CENTRO CLINICO INTEGRAL ROPHI/ CIR | Clinic, multiple specialties |
| CENTRO ENDOSCOPICO INTERVENCIONISTA, S.A. | Endoscopy / surgery |
| GANDDINI DENTAL | Dental |
| SMILE FACTORY | Dental |
| ORTOTAL | Orthopaedics |
| HOSPITAL AMBULATORIO MULTIMEDICA | Hospital, multiple specialties |

# APPENDIX 4 – TRADE AND INVESTMENT TREATIES: GUATEMALA

## GATS Commitments

The medical tourism industry has the potential to be affected by bilateral, regional and multilateral trade and investment treaties through increased international patient flows and equitable access to healthcare; although these agreements are arguably not the most crucial drivers. The World Trade Organization's (WTO) General Agreement on Trade in Services (GATS), is an example of such an agreement, in that it requires member states to progressively remove barriers to health services in four specific 'modes' (WTO, n.d./a):

1. The supply of cross-border health services (such as telemedicine, or laboratory testing)
2. The supply of health services for international consumers (such as medical tourism)
3. The presence of foreign direct investment in health services (such as foreign direct investment in a health facility)
4. The movement of health workers (such as allowing foreign health professionals to practice within the country)

Trade liberalization, through the continuous removal of trade barriers, is primarily achieved through two channels: (1) improving market access by removing or reducing tariff and non-tariff barriers on foreign goods, services, and investments into the domestic market; and (2) providing national treatment, by enforcing equal rules and regulations on foreign and domestic goods, services, and investments. GATS has taken a 'positive list approach', meaning that nations voluntarily designate which sectors to liberalize, with additional options to introduce exclusions or limitations to

market access and national treatment for each mode of each sector. GATS commitments are binding and any violation of national commitments can result in a WTO trade dispute initiated by another member nation.

Guatemala has made very few sector liberalizations in their GATS schedule of specific commitments (WTO, 1994). Their horizontal commitments allow them to protect employment for Guatemalan workers, indicating their intentions to comply with the Guatemalan Labour Code that 90% of employees must be Guatemalan and earn a minimum of 85% of total paid wages. These requirements can be further modified at the discretion of the Ministry of Labour to either eliminate employment of all foreign workers, or decrease the commitment by 10% for five years, on the condition that during this time Guatemalan workers are being trained in the relevant activity. Sector-specific commitments are confined to computer services, insurance services (excluding health insurance), banking services, tourism and travel-related services, and air transport services; they have made no commitments to liberalize health or health-related sectors within GATS.

## Regional and Bilateral Trade Agreements

Guatemala has concluded several regional trade agreements (RTAs) and bilateral trade agreements (BTAs).

Regional and bilateral trade treaties include (WTO, n.d./b):

- Central American Common Market (CACM; Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua)
- Chile-Guatemala FTA
- Colombia-Northern Triangle (El Salvador, Guatemala, Honduras)
- Dominican Republic-Central America
- Dominican Republic-Central America-United States FTA (CAFTA-DR)

- EU-Central America
- Guatemala and the Separate Customs Territory of Taiwan, Penghu, Kinmen and Matsu
- Mexico-Northern Triangle
- Panama-Central America

The General Treaty on Central American Economic Integration introduced a free-trade area among five Central American Countries (Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua) forming the Central American Common Market (CACM) (WTO, 2000). CACM is primarily focused on trade in goods and has established free trade in all goods, with the exception of roasted coffee, alcoholic beverages, wheat, and petroleum products among certain countries. This list is revised each year by the Ministers for Economy and Trade with the task in mind of removing these exceptions.

Guatemala's FTA with Chile expanded significantly upon their GATS commitments, including the full liberalization of health related and social services, with reservations for future measures for social services, although the same was not indicated for health services (WTO, 2013). The EU-Central America agreement liberalized several new health sectors including medical, dental and midwifery services, although it maintains a positive list approach, and deals exclusively with Modes 1 and 2 (European Commission, 2012), Mode 2 of which is intended to increase medical tourism.

Guatemala's FTA with the Dominican Republic and United States as a member of the Central American countries (CAFTA-DR), entered into force in 2006 (Office of the United States Trade Representative, n.d.), may introduce new challenges for public health regulation in Guatemala (Olson et al., 2004). CAFTA's obligations for the liberalization and deregulation of public services and all service activities exceed

those within the GATS framework (Olson et al., 2004). The lack of a definition of services within the agreement results in a reversion to the GATS definition, which is both broad and ambiguous: "b) 'services' includes any service in any sector, except services supplied in the exercise of governmental authority; c) 'a service supplied in the exercise of governmental authority' means any service which is supplied neither on a commercial basis, nor in competition with one or many service suppliers (WTO, n.d./a; Art. I.1.3, Sections b and c). Since health services in most countries (including Guatemala) have a mix of both government and private sector provision, this exception does not protect any expansion of public health services from a potential trade dispute. While GATS implements the positive list approach, CAFTA utilizes a negative list approach, meaning that all services are included within the obligations of the trade in cross-border services chapter and the investment chapter; with the only exception being for services that are included in the annex of exclusions, and only for those obligations which listed as not applicable. Guatemala's annex protects state owned lands, forestry, notaries, performing arts, tour guides, and air services (Office of the United States Trade Representative, n.d.). There are no specific exclusions for health services, although their national treatment exclusion for professional services stated as "an enterprise organized under the laws of a foreign country that supplies a professional service that requires a legally recognized university degree, certificate, or diploma may not be established in Guatemala" (Office of the United States Trade Representative, n.d.), may afford them some protection.

Further, CAFTA introduces investor-state dispute settlement (ISDS) procedures, and establishes the International Center for the Settlement of Investor Disputes (ICSID, a World Bank agency) and the United Nations Commission for International Trade and Law (UNCITRAL, an UNCTAD agency) as venues for arbitration. As of 2004, ICSID and UNCITRAL had presided over 28 cases against Canada, Mexico and the United States, brought forward by transnational corporations under the investment chapter of NAFTA, the majority of which were decided in favour of the corporations (Olson et al., 2004). Expansive liberalization of services in CAFTA with weak definitions of exempt services and a negative list approach, along with an ISDS clause, opens Guatemala up to a myriad of unforeseeable international disputes within their services sector.

## Bilateral Investment Promotion and Protection Agreements (BIPAs)

BIPAs, sometimes signed as bilateral investment treaties (BITs) or foreign investment protection and promotion agreements (FIPAs), have the unitary purpose of guaranteeing the rights of foreign investors among the two signing parties (Dhar, Joseph, & James, 2012). Investment chapters and provisions can be contained within regional and bilateral agreements, as well as in Mode 3 of GATS, however they are not the sole purpose of these agreements, but proliferate primarily in specific BIPAs. As of December 2012 UNCTAD has documented 12 of these agreements signed by Guatemala with Argentina, Belgium, Chile, Cuba, Czech Republic, Finland, France, Korea, Netherlands, Spain, Switzerland, and the Taiwan Province of China, each containing an ISDS clause (UNCTAD, 2012a).

The ISDS clause permits foreign private investors to initiate arbitration against a government for direct expropriation of investment (nationalization and transferring titles); as well as indirect expropriation (state regulatory or legislative actions that erode the value of the investment) (UNCTAD, 2012b). What is particularly concerning is that even when expropriation has taken place for a public purpose, and does not discriminate unfairly against foreign and domestic investors, there may still be a requirement for "fair and equitable compensation." The potential for governments to owe extensive financial penalties to private foreign investors may impede attempts by Guatemala to increase regulatory protections in the interest of its citizens.

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