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Health Care Systems Overview:
Puerto Rico and Argentina

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by

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A research paper submitted in fulfillment of the requirements for one and one half credits, GRADUATE INDEPENDENT RESEARCH PROJECT, Winter Term 1998, Andrew Lawlor, Faculty Advisor

Faculty Comments

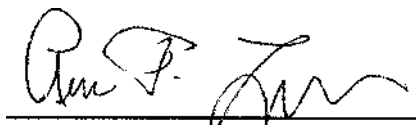
The Health Care Systems Study reviews the state of the industry in Puerto Rico and Argentina.

The study was sponsored by a large multi-national firm who is evaluating the strategy to enter Latin countries with a health care consulting business unit and portfolio of products and services.

Mr. Villegas worked on the domestic (U.S.) portion of the study with secondary research tasks here at the University of MI before heading off to Puerto Rico, Argentina, and Chile as part of his team's overall IMAP initiative.

As part of his Winter "A" term course load, Rene was responsible for logistics and trip planning with the multi-natianal firm as -well-as in-country interview planning and set-up. Tfce attached papers on Puerto Rico and Argentina were also part of the Independent Study commitment.

For the effort, Mr. Villegas should receive a "GD" grade.



Andrew F. Lawlor, Faculty Advisor
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Puerto Rico and Its Healthcare System

Executive Summary

Puerto Rico, a Caribbean island of approximately 3.8 million people, ranks as the 120' largest market in the world. The island is densely populated, with 76.6% of residents living in urban areas, primarily in the capital city of San Juan. The population density on the island is an estimated 1,071 inhabitants per square mile. While traditionally dependent on agriculture, Puerto Rico has developed strong tourism and manufacturing industries. The economy is also bolstered by significant aid from the United States. Puerto Rico has one of the highest living standards in the region, though it suffers from high unemployment, inflation, and public debt.

As a Commonwealth of the United States, Puerto Rico's political environment provides a relatively stable framework for conducting business. Ongoing pressure from opposing factions to change Puerto Rico's political status from commonwealth to independent nation or U.S. state does not appear to threaten the political stability of the island.

Economically, Puerto Rico exhibits many of the characteristics of a developing nation. Unemployment is high and per capita income is low when compared to the rest of the United States. Still, Puerto Rico appears to be the most advanced economy in the Caribbean region. With its close ties to the United States with regard to trade and aid, Puerto Rico appears to provide a strong economic base for external business development.

The Puerto Rican healthcare system is undergoing a transformation whereby the public healthcare system is being privatized. Private insurers are in the process of taking charge of the public system in each of the seven regional zones in Puerto Rico. The privatization of the public system is leading to significant pressures for these insurers and their associated care providers to contain costs.

Political Overview

Puerto Rico, originally a Spanish colony, was ceded to the United States in 1917 under a Treaty of Paris provision. Residents were granted U.S. citizenship in 1917, and in 1947 were given the right to elect their own governor. Finally, on July 25, 1952, Puerto Rico became a self-governing commonwealth of the United States. Since that time, Puerto Rican citizens have continually voted to remain an "unincorporated territory" of the United States. Still, supporters of Puerto Rican statehood call for periodic referendums, keeping the issue of statehood at the forefront. At the same time, a small proportion of the population favors independence from the United States. Overall, however, these factions do not seem to have the necessary support to accomplish their divergent aims. Thus, Puerto Rico's status as a U.S. Commonwealth makes for a stable political environment.

Puerto Rico's citizens are subject to U.S. federal laws, but are free from federal taxes, except such mutual consent taxes as social security. In return, Puerto Ricans are prohibited from voting in national elections and are only represented in Congress by a resident commissioner who sits in the House of Representatives but has limited power.

Being governed by U.S. laws makes the Puerto Rican market an attractive one for investment. For example, the United States' general lack of protectionism and freedom from border threats makes for a healthy business climate. Additionally, many of the government's pro-business programs support the Puerto Rican economy. Lastly, the external perception of the United States as a strong place to conduct business and trade only strengthens the business climate of Puerto Rico.

Economic Overview

Puerto Rico has one of the most dynamic economies in the Caribbean region. Industry has surpassed agriculture as the primary sector of economic activity and income. Encouraged by duty free access to the US and by tax incentives, US firms have invested heavily in Puerto Rico since the 1950s. Pharmaceuticals, electronics, textiles, petrochemicals, and processed foods all serve as important industries. Tourism has also traditionally been an important source of income for the island, with an estimated 3.9 million tourists visiting the island per year.

The investment incentives provided by the Commonwealth since the decision to industrialize was made 40 years ago have led to the presence of approximately 150 Puerto Rican subsidiaries of Fortune 500 companies.

While Puerto Rico has a relatively strong economy for the region, many economic indicators suggest that Puerto Rico is still in the developing stage. For example, per capita income in Puerto Rico is half that of the nearest U.S. state. Additionally,' unemployment was recently at a relatively high 13.7%, which was near an all-time low for Puerto Rico. Also, Puerto Rico relies heavily on direct subsidies from the U.S. These subsidies comprise approximately 25% of Puerto Rico's GDP.

Still, several factors suggest that Puerto Rico's economy is a favorable place to invest. Inflation appears to be under control, at an estimated 4%. Additionally, Puerto Rico's use of the U.S. dollar as its currency mitigates any currency risk and repatriation concerns for U.S. companies. Finally, and probably most importantly, the apparent economic weaknesses mentioned above may not appear as weak when assessed in the context of other developing countries. *Exhibit 1* below summarizes Puerto Rico's general economic variables.

Exhibit 1 - Economic Variables

Economic Variable	Puerto Rico Value	Notes
Per Capita Income	$7,020	1996 estimate; Approximately half that of the 50th-ranked state, Mississippi Source: CIA World Fact Book
% of healthcare	3.5%* / 4.8%**	*% of Commonwealth budget spent on healthcare **National health expenditure as a % of GNP Source: CIA World Fact Book
GDP per Capita	$11,800	1995 estimate Source: J&J document on Puerto Rican market; no primary source given
Growth in GDP	3.3%	1995 estimate. Source: J&J document on Puerto Rican market; no primary source given
Unemployment	13.7%	1995 estimate; Currently rather low, has been known to run as high as 20% Source: J&J document on Puerto Rican market; no primary source given
Population Density	1,071 Inhabitants Per Square Mile	1998 Estimate
Inflation	4%	1995 estimate Source: J&J document on Puerto Rican market; no primary source given
Exchange Rate	$1:$1	As the U.S. dollar is the official currency, doing business in Puerto Rico involves no currency risk for U.S.-based companies

Overview of Healthcare System

Within Puerto Rico, healthcare for all is guaranteed by the Constitution. As such, the government is taking a number of steps to provide quality healthcare to the entire population.

The healthcare system in Puerto Rico is subdivided to serve different populations. First, there are disparate public and private healthcare systems for the island's population. Private and public patient populations each comprise approximately 50% of the healthcare population. Private care in Puerto Rico is much like the care offered in the U.S. Many private hospitals were originally community-based religious hospitals. Private hospitals are funded primarily by private insurance, but also receive significant revenues from Medicare.

The public system, in contrast, is funded primarily with Commonwealth and local municipal funds. The public system is composed of three tiers: primary care services at community health centers, acute and specialized hospitalization services at an area level, and tertiary care services at a regional level. Healthcare reform legislation was approved

in 1993, championed by current Commonwealth Governor Pedro Rosello, a physician. As part of healthcare reform, the government is working with health insurance providers to transfer much of the indigent population to a managed care program. The underlying objectives of this program include enhancing the quality of care to this population and controlling the costs of delivering this care. In so doing, many of government facilities are undergoing a process of privatization.

The process of privatizing the public sector health system has entailed dividing the island into seven regions and allowing private insurance providers to bid on the managed care business in each region. Within each region, there is a regional hospital and one or two area hospitals. As of 1996, the managed care business in the seven regions was divided among a number of insurance competitors. ***Exhibit 2*** highlights the "ownership" of each region.

Exhibit 2 - Insurance Providers Under Healthcare Reform

Region	Provider
Northeast Area	Blue Cross
North Region	Triple S Triple C
Northwest Area	Triple S Triple C
Southwest Area	United HealthCare
Southeast Area	Blue Cross
Central Region	PCA
East Area	United HealthCare

Source: "Integrating One Million Medicaid Lives Into The Emerging Private Health Care Sector in Puerto Rico", Carlos A. Munoz, Ph.D, President Triple-C, Inc.

Healthcare in Puerto Rico, due in large part to Puerto Rico's association with the United States, is relatively advanced. Traditional indicators of public health appear to mirror those of advanced countries. According to the PAHO:

> Puerto Rico has experienced a social transformation in the last 50 years that has brought with it a significant increase in longevity and life expectancy. It is expected that this pattern will continue and that by the year 2030, 15% of the population will be 65 years of age or older. This, and other trends, such as the passage from a rural agricultural society to an urban industrial one, have entailed changes in morbidity and mortality.

Puerto Rico's healthcare system is sufficiently advanced to be considered fully developed. Thus, it appears that many of the healthcare issues that are pertinent to advanced health systems are pertinent in Puerto Rico.

Exhibit 3 below highlights some of the vital healthcare statistics for Puerto Rico.

Exhibit 3 - Healthcare Variables

Healthcare Variable	Puerto Rico Value	Notes
Segments		
Private vs. Public	50% / 50%	By number of patients Source: PAHO
Patients	All 3.8 Million citizens have access to healthcare; In 1994, 400,000 patients were admitted to hospitals, while there were approximately 3.8 million outpatient visits	Source: PAHO, American Hospital Association
Revenue / Expenditures	Total Expenditures on Healthcare = $1,800 Million	1992 Estimate; Approximately 44% of total ($800 Million) is on public care. Approximately 56% is on private. Healthcare reform would likely change the breakdown Source: PAHO
Beds	~8,900 Total	1995 Estimate; Breakdown is 41.7% Public vs. 58.3% Private. Breakdown likely to change given move toward privatization. Note: Other estimates have placed the number of beds in Puerto Rico as high as 13,000 Source: J&J document on Puerto Rican market; no primary source given
Surgeons	~364	1995 Estimate; Breakdown is 80% office-based, 20% hospital-based Source: J&J document on Puerto Rican market; no primary source given
Doctors (Active)	~9,831	1995 Estimate; Breakdown is 79% based in physicians office, 21% based in hospitals Source: J&J document on Puerto Rican market; no primary source given
Nurses	~4,668	1992 Estimate; Breakdown is 56% public and 44% private sector Source: PAHO
Source of Financing		
Government	28.5%	As a percentage of 1989-1990 admissions to

(Medically Indigent)		hospitals Source: PAHO
Personal	6.8%	As a percentage of 1989-1990 admissions to hospitals Source: PAHO
Health Insurance Plans	57.9%	As a percentage of 1989-1990 admissions to hospitals Source: PAHO
Other (Unspecified)	6.8%	As a percentage of 1989-1990 admissions to hospitals Source: PAHO
Macro Health Trends		
Injuries	In 1992, accidents were the sixth-ranking cause of death, with a toll of 1,209	Most of the injury fatalities involve motor vehicles Source: PAHO
Causes of Death	Heart disease and malignant tumors were the two leading causes of death, accounting for 37.5% of 1992 fatalities	Source: PAHO
Birth/Mortality Rates	Birth: 18.2 per 1,000 people Death: 6.9 per 1,000 people	1992 Estimates Source: PAHO
Surgeries	319,755	1993 Estimate Source: American Hospital Association
Diseases	See Notes	Acute infectious tropical diseases coexist alongside chronic degenerative diseases. The incidence of cardiovascular diseases and cancer is high. Alcohol abuse and smoking are common, the population is sedentary, the diet contains too much fat and protein, and drug consumption is on the increase. Source: PAHO

Argentina and Its Healthcare System

Political Overview

Argentina is a federal republic comprising 23 provinces and the Federal District of Buenos Aires (downtown Buenos Aires). The federal government consists of a 259 member Chamber of Deputies, elected by universal adult (>18 years) suffrage, and a 48 member Senate, nominated by the Provincial Government every 9 years. Members of the Chamber each serve a four year term, with one half of the seats elected every two years. The Supreme Court members are appointed by the President of Argentina. There are several political parties ranging from the far left to the far right. However, the two primary parties are the Justicalist Party (PJ), a Peronist political organization and the Radical Civil Union (UCR), a moderately left-of-center party. President Carlos Saul Menem (PJ) was first elected on July 8, 1989 and most recently on May 14, 1995 to a four year term. The next election is scheduled for 1999.

As recently as 1984, Argentina was controlled by a military regime headed by General Galtieri. However, following the defeat to the British in 1982's Falkland Islands War, the populace demanded and received an election to replace the ineffective leadership. In that election. Raul Alfonsin was elected as President of Argentina. Although the new government investigated and dismantled the former military machine, it failed to stabilize the economy and control inflation. As a result, the end of Alfonsin's government was marred by strikes, violent rallies, and attempted coup d'etats which lead to the governments losing control of the country and moving up the inauguration of the new President-elect in 1989, Carlos Menem. In April 1994, the two primary parties, PJ and UCR, which had maintained a bi-party agreement since 1916 witnessed its worst electoral results since 1916. A third party consisting of leftist and discontent voters consolidated itself as the a third and important political force - the Frente Grande.

Economic Overview

Argentina, rich in natural resources, benefits also from a highly literate population (95%), an export orientated agricultural sector, and a diversified industrial base. The annual GDP of Argentina, estimated at $280 billion dollars in 1995, was expected to grow by nearly 5% in 1996. Furthermore, the GDP averaged growth of 7% between 1991 and 1994; the 4.4% contraction in 1995's GDP is largely attributable to ancillary effects of the Mexican currency crises of 1995. The composition of GDP by sector include: agriculture - 6%, industry - 31%, and services - 63%.

While some of the increase in purchasing power of Argentina can be attributed to an overvalued "nuevo peso", which was pegged to the US dollar in 1991 to prevent devaluation, there is no doubt that the Argentine economy is expanding and one of the most prosperous in South America. Upon his election in 1989, with Argentina in recession, President Carlos Menem instituted a comprehensive economic restructuring plan that includes the privatization of most state owned industries and utilities, the elimination of barriers to investment, and the liberalization of trade policy. The results have been that Argentines have increased investment in Argentine industry, as well as an increase in foreign direct investment. Furthermore, annual inflation has fallen to its lowest level in 50 years, 1.6% in 1995.

The Argentine economy does face some problems. First, is the high rate of unemployment and underemployment. In 1995, the unemployment and underemployment rate in Argentina was

estimated at 16.5%. It is believed that this high rate is in part due to the deregulation and downsizing of formerly state owned/controlled enterprises. An additional problem facing the Argentine government is the size of its foreign debt. In 1996, Argentina was late in making a payment on its International Monetary Fund loan and was forced to restructure its debt. Compounding this issue is the increase in debt financing used for new, expansive domestic programs (one of which includes a loan to assist in restructuring the social health system).

The per capita income in Argentina was $8,250 in 1996 and has increased steadily over the last 7 years. In fact, when differences in costs of living are taken into account, Argentina has one of the highest standards of living in the world. In addition, the percentage of Argentines living in extreme poverty, as measured by food consumption, education, housing, and health care coverage, is the second lowest in South and Central America at 5.5%.

Table 1: Economic Variables

Economic Variable	Argentina Value	Notes
Per Capita Income		
Growth in Per Capita Income	NA	
Per Capita Income Spent on Healthcare	$546	1993 Estimate, 1996 mediSTAT report
GDP	$283B	1995 Estimate,1996 LAFIS Report
GDP Per Capita	$8250	1995 Estimate,1996 LAFIS Report
Growth in GDP	4.5%	Estimate for 1996, World Factbook
% of GDP spent on healthcare	7%	1993 Estimate, 1996 mediSTAT report
Unemployment	16%	Estimate for 1995, World Factbook
Population	34.7 million (see note)	40% live in the province of Buenos Aires and another 9% live in the city of Buenos Aires; 1996, 1996 World Factbook
Population Density	12.1/km (see note)	In the province of Buenos Aires, the density is 42.2/km and in the city of Buenos Aires, the density is 14,870/km; 1996 mediSTAT report
Inflation	1.7%	Estimate for 1995, World Factbook
Exchange Rate	1 nuevo peso = $1 (see note)	The nuevo peso is believed to be overvalued, because it is pegged to the dollar and does not truly reflect purchasing power.

Overview of Healthcare System

Description of Healthcare System

Although Argentina has a well developed health system according to key indicators (see Table 2), the country lags behind the average developed country in terms of the health status of its citizens. The country's health services system is comprised of three entities: public, social security, and private which cover all 23 provinces and the capital city of Buenos Aires.

Currently, over 50% of the population relies on the outdated and inefficient social insurance system for medical care. Furthermore, as unemployment increases, a growing proportion of the population is forced to rely on public hospitals and clinics which are inadequately funded and poorly managed.

Social Service System

Around 18 million Argentines, over 50% of the population, have some form of social health service, coordinated by the National Health Insurance Administration (ANSSAL). Most Argentine workers have compulsory membership in a health insurance fund (Obra Social) linked to their occupation or place of employment. Note that this is not considered public health care. The Obras Sociales have little infrastructure of their own and thus contracts private providers for the delivery of almost all services. There are currently over 300 Obras Sociales in operation in Argentina, but the government has recently begun to restructure the social security sector to increase the size and efficiency of the Obras Sociales. In October 1996, President Menem stated that the optimal number of Obras Sociales would be fewer than 80 by 1997. While this has not happened, the January 1998 issue of El Cronista reported that in 1997, "...75 medical & health services companies left the Argentine market, and a similar number of companies are involved in mergers & acquisitions." To propagate such changes in the social system, the federal government recently cut the mandatory amount employers must pay to the Obras Sociales to 5% of payroll (from 6%) and maintained employee contribution at 3%.

In addition to the current laborer's funds, there is a special health fund for Retirees and Pensioners. The fund is the Programme of Integrated Medical Care (PAMI) and has 4 million members. The fund also includes as members veterans of the Falklands War, mothers of 7 or more children, and HIV/AIDS patients. As these members did not pay into the fund, financial difficulties have forced the transference of 400,000 beneficiaries from PAMI to public health services.

Public Service System

MSAS, the federal Ministry of Health and Social Action, develops healthcare policy at the national level and isresponsible for regulating the sector as a whole. Recently, however, some authority over the provision and financing of public health services has been transferred to the provincial and municipal governments. Public health services, primarily hospital based, cover the uninsured and underinsured and represent about 33% of the population. Often times, the public hospitals subsidize the inefficient social healthcare system by treating patients who, although enrolled in an Obras Sociales, are limited because of geographic or economic reasons (i.e., copayments). In addition, the public hospitals are not in a position to recover the cost of treatment either from the patient or the Obras Sociales to which the patient is affiliated.

In the larger cities of Buenos Aries, Cordoba, Rosario, and Sante Fe, the provincial hospitals are supplemented by municipal hospitals. In recent years the average size of public hospitals has decreased so that in 1996 there were only 24 hospitals with more than 500 beds. Most public hospitals are old and poorly equipped. Furthermore, individual hospitals are restricted in their improvement efforts and hampered by inadequate financing and inefficient management due to the fact that decision making is centralized at the provincial/municipal level.

Private Service System

As dissatisfaction with the quality and inefficiency of public health care service has grown in recent years, so has the private health care sector. In fact, almost 15 percent of the population now has private health insurance through one of the more than 200 private health insurance firms, known as Pre-Pagas. The private health care insurance is currently unregulated but faces increasing regulation to provide adequate protection of users. In addition, increasing competition in this sector has resulted in a number of mergers and an influx of foreign capital. Most private hospitals are run by groups of physicians and tend to be smaller, but better equipped, than public hospitals. Private hospitals also provide services to social insurance (see above) if it is contracted to do so. As a result, there has been rapid growth in the number of private facilities, which accounted for half of inpatient treatment in 1996.

Healthcare Regulatory Overview

With the success of President Menem's economic plan, the government has been able to focus much of its time and energy on the troubled Argentine health care system. Argentina spends 7% (1995) of GDP on healthcare, considerably more then other Latin American countries. This however, is more indicative of a costly and inefficient health care system than any superior standard of health service. The social health insurance system and the public hospital network are both targets of fundamental reform with the goals of:

1. providing universal access to health care
2. improving quality and efficiency of health care
3. reducing avoidable morbidity
4. rethinking the role of the state in health care

These reforms are receiving support and financing through several international aid agencies. In particular the World Bank is financing the reform of the ANNSAL/DGI redistribution program and the PAMI fund. The three service systems have all been affected, and will be affected, by present and future government reforms in the following ways:

Social Service System

- ANSSAL distributes 10% of the 8% contributed by employees and employers to smaller Obras Sociales to ensure that these funds were able to purchase a basic level of services for their members. This redistribution was not working and the responsibility has passed to the national tax collection agency (DGI). Improving the equity and the redistribution of this 10% is one of the key elements contained in the reform program.
- Massive reform of the PAMI Program.
- Those few, small Obras Sociales who elect to maintain their own facilities after future reforms, will be forced to contract with hospital management companies to remain competitive.
- Deregulated Obras Sociales so that members can choose among various insurance plan rather than be assigned a health care plan based on profession.

Public System

- The government has reduced it's funding of hospitals to cover only payroll and administrative costs.

- The state is cracking down on physicians who are shirking their commitment at public hospitals to provide service at private facilities for higher wages.
- The autonomous management of public hospitals.
- A legal framework for the increased collection of fees from Obras Sociales and private insurers.

Private System

- Private insurance companies are facing regulations to provide minimum levels of service quality

Table 2: Healthcare Variables

Healthcare Variable	Argentina Value	Notes
Sector Breakdown	Public / Social / Private	1993; 1996 mediSTAT report
% of GDP	1.57% / 2.61% / 3.02%	1993; 1996 mediSTAT report
Total Expenditure (in Argentine Millions)	3988 / 6667 / 7700	1993; 1996 mediSTAT report
% of total health expenditure	21.7% / 36.3% / 41.9	1993; 1996 mediSTAT report
Patients covered	11.95m / 18.5 / 9.4	1993; 1996 mediSTAT report
Beds	76,969 / 7,595 / 73,005	1994; 1996 mediSTAT report
Hospitals	1303 / 104 / 1879	1993; 1996 mediSTAT report
Labor		
Surgeons		
Doctors	100,000 or 2.9/1000 people	1996; 1996 mediSTAT report
Nurses	70,000 nurses, but only 20,000 are vocationally trained	The number of nurses with degrees is decreasing in absolute terms due to better employment opportunities outside the country. 1994 PAHO Report
Macro Health Trends		
Patient Discharges	1,758,461	1993; 1996 mediSTAT report
Causes of Death	Heart Disease, Malignant Tumors, Cerebrovascular Disease	1993; 1996 mediSTAT report
Birth Rate	19.81/1000 citizens	Infant Mortality Rate = 22.9/1000 births; 1993;

Healthcare Variable	Argentina Value	Notes
		1996 mediSTAT report
Mortality Rates	7.9/1000 citizens	1993; 1996 mediSTAT report
Population Growth	1.1%/year	1993; 1996 mediSTAT report
Life Expectancy	71.66 years	1993; 1996 mediSTAT report