



Brazilian Health Care Sector Overview

The Brazilian Health Care sector is one of the largest and fastest growing markets in the world. According to industry analysts, Brazil spends and invests approximately 9 % of its GDP annually on health care. The country has 7,000 hospitals, 70% of which are privately owned. Medical equipment and pharmaceutical imports continue to grow at more than 10% a year. Companies are also expanding into sectors such as primary care assistance, prevention, home care and treatment of rare and chronic diseases. At the same time, the Brazilian Government has been promoting its public private partnership model as a means to increase access, reduce imports and develop its own healthcare industry.

The Unified Health System (Sistema Unico de Saude - SUS) is Brazil's public health care system that offers free universal health care coverage and is considered the largest in the world of its kind. Productive Development Partnerships (PDP) have enabled international companies to supply the public segment with high technology products for complex healthcare treatments. Also, given the increase in GDP per capita and disposable income over the past decade, foreign investors have entered the private health insurance sector as demand for more sophisticated services and medical treatment grow. International companies have also acquired some of the largest Brazilian pharmaceutical, medical equipment and drugstore businesses.

São Paulo

The State of São Paulo is located in the Southeast portion of the country and is considered Brazil's financial and economic center. It has the second largest GDP in South America after Brazil and ranked 10th in the world, according to UN data. Sao Paulo is one of the largest cities in the world while the Sao Paulo metropolitan area has a population of over 20 million inhabitants.

The State of São Paulo operates a total of 14,215 health facilities, among which 881 are hospitals. The quality treatment and specialty units stand out among the best in Latin America, serving patients from other states, countries in the region. Among those are world class institutions and leading regional hospitals such as Hospital Albert Einstein, Hospital das Clínicas, Hospital Sírio-Libanês, Hospital São Luis, Hospital Alemão Oswaldo Cruz, Hospital Nove de Julho and Instituto do Câncer. These health care institutions are also major academic and research centers.

Rio Grande do Sul

Rio Grande do Sul is located in the southern region of Brazil, representing 6% of the population and 6.32% of the Brazilian economy. The State's GDP per capita has more than doubled in the past 10 years



Brazilian Health Care Sector Overview

and the area is considered one of the most important regions for investment outside of the Sao Paulo–Rio de Janeiro axis. There are 377 hospitals in the State located throughout 274 municipalities. Sixty-eight percent of all beds are operated by the national hospital system, SUS.

Porto Alegre is the capital of Rio Grande do Sul and the most developed city in the region. Thirty-seven percent of the State's population is concentrated in the Porto Alegre Metropolitan area. As such, 37 percent of all hospital beds are located in the metropolitan area while 33 hospitals and 25 percent of all beds are situated in Porto Alegre City proper. This area has one of the most advanced healthcare infrastructures in the country, with some of the most modern and sophisticated hospital clusters and centers of excellence in Brazil. The leading medical centers are part of the Porto Alegre Health Care (PAHC) cluster, which is comprised of Hospital Mãe de Deus, Hospital Moinho de Ventos, Hospital São Lucas and Santa Casa de Misericórdia. Other important health care centers are located in surrounding cities of

Passo Fundo, Santa Maria, Caxias do Sul and Pelotas.

Health IT in Brazil

Changes in Brazil's demographic makeup, resulting from a drop in infant mortality and birth rates, an increase in life expectancy and an aging population have placed new demands on the health care system. Under the direction of the Brazilian Ministry of Health, SUS has developed a strategy to address the growing challenges of guaranteeing free universal health care while managing soaring treatment costs, complex and chronic diseases and epidemics. DataSUS the IT Office of SUS was created in 2011 and charged with implementing this strategy through the use of health IT. One of the key priorities for DataSUS has been the development of a National Health Registry that will identify the user, health care providers and health care facilities in efforts to analyze, control and manage treatments and productivity.

This office has also developed e-SUS, a program designed to restructure and guarantee the interoperability of all IT systems used by SUS hospitals, clinics and other health care facilities. This includes the development and integration of a number of health IT software applications and solutions to monitor the health of all citizens through the use of a National Health Card (Cartão Nacional de Saúde). It's e-SUS AB is used for primary care to identify users, schedule appointments and purchase medication. It has also developed an electronic health record (EHR) and Hospital Information System (HIS) called e-SUS Hospitalar. Within these solutions, a number of modules exist for immunization control, family planning and pregnancy, chronic disease, breast cancer, dental care and monitoring of absent patients.

There are currently nine public hospitals fully digitalized with electronic records (i.e., completely paperless). The program started as a pilot in Rio de Janeiro, with the following federal and municipal hospi-



Brazilian Health Care Sector Overview

tals: Hospital Federal do Andaraí, Hospital Federal de Bonsucesso, Hospital Federal Cardoso Fontes, Hospital Federal de Ipanema, Hospital Federal da Lagoa, Hospital Federal dos Servidores do Estado, Hospital Municipal Miguel Couto in Rio de Janeiro, Instituto José Frota in Ceará and Hospital Geral Roberto Santos in Bahia.

In addition, the Brazilian Government created the Tele-health Brazil Network of Brazil in 2007 as a pilot project. The program was designed to improve the quality of SUS primary care through tele-assistance and tele-education. The program is coordinated by the Ministry of Health's Secretariat of Work and Education Management in Health and includes 9 tele-health nuclei located in universities in the states of Amazonas, Ceará, Pernambuco, Goiás, Minas Gerais, Rio de Janeiro, São Paulo, Santa Catarina e Rio Grande do Sul. The primary goals of the program are to reduce costs and travel time, increase services in areas difficult to access and create a more flexible system. Services include tele-consultations, tele-diagnosis, tele-education and second opinion.

The program also includes a number of participating government agencies and partners. Two such organizations are the University Network for Telemedicine (RUTE) and the National Network of Education and Research (RNP). The RUTE is made up of the 57 federal university hospitals that are part of the Tele-health Network. The purpose of the network is to improve the existing infrastructure and promote the integration of the various tele-health projects within the network. The RNP connects and coordinates the public and private academic institutions, with a focus on creating additional tele-health nucleus centers throughout the 27 states of Brazil.

The two Brazilian health IT professional societies and associations include the Brazilian Society for Health Informatics (SBIS) and the Brazilian Health CIO Association (ABCIS). SBIS runs formal training and education programs for Health IT users and technicians and a certification program for Health IT systems. SBIS has currently certified 22 EHR's and other health IT solutions. The society also organizes annual health IT and scientific medical conferences. ABCIS has approximately 200 members composed of health IT users, solution providers and hospitals.

Some of the leading universities and research institutes in the health IT sector include the Federal University of Rio Grande do Sul (Universidade Federal do Rio Grande do Sul), the State University of Campinas (Universidade Estadual de Campinas - UNICAMP), University of Sao Paulo (Universidade de São Paulo), Paulista School of Medicine (Escola Paulista de Medicina), Heart Institute (Instituto do Coração), University of Sao Paulo School of Medicine (Faculdade de Medicina da USP), COPPE/UFRJ Graduate School of Engineering and Federal University of Sao Paulo, (Unifesp, which offered the first health IT graduate program in Brazil).

Two phenomena in the IT sector make Brazil ripe for health IT solutions. Firstly, Brazilians are avid users of connected devices and have become the biggest users of social media in the world. Secondly, the success of the Brazilian electronic banking system is important indicator that Brazil is well positioned and capable to adopt e-health technologies and practices. Further, according to an Accenture study, the



Brazilian Health Care Sector Overview

Brazilian public is already demanding e-health solutions as part of the health care offering. Ninety percent of Brazilians believe e-health resources are important while 71% would consider opting for a health care provider that offers EHR/PHR solutions. At the same time, the use of health IT by health care facilities and practitioners is limited. Further, many health care and industry experts believe that health IT options are few and do not adequately address the needs of the health care market.

For more information about the HealthIT Trade Mission to Brazil please visit:

http://www.export.gov/Brazil/contactus/eg_br_076005.asp