

Inclusive Business Case Study: Fundación Cardiovascular (FCV)

Location: Colombia Sector: Health IFC Investment: \$30 million in long-term debt financing

COMPANY BACKGROUND

Established in 1986 as a nonprofit foundation by a group of cardiologists to address the more than 50% mortality rate due to cardiovascular diseases in eastern Colombia, Fundación Cardiovascular (FCV) has grown to become the largest private sector health care network in the country. FCV offers tertiary level services at hospitals as well as telemedicine, training, manufacturing of hospital products, assembly of bioengineering equipment, and hospital management software among other areas. As of 2013, the company employed 1,400 people. As a foundation, FCV is managed by a general assembly of independent members and founders.



FCV'S INCLUSIVE BUSINESS MODEL

FCV is expanding tertiary health care services for low-and middle-income patients in small cities. These patients have a harder time accessing specialized care which is concentrated in big city hospitals. While its main focus areas are cardiology, cardiovascular surgery, and neurosurgery, FCV is also strong in neurology, organ transplants, high risk obstetrics, and pediatrics.

FCV owns a hospital in Bucaramanga in the northern Santander region and operates three others in cities with populations of less than 650,000 people. A new 468-bed capacity hospital in Floridablanca in Bucaramanga will be completed by the end of 2015. FCV manages three other hospitals through multi-year government contracts: Santa Marta in the north, Manizales in the central coffee-growing region, and Ibagué also in the center. As of 2013, FCV had 600+ beds under management. Approximately 45% of its patients served annually are low-income—they work in the informal sector and earn slightly more than the minimum wage.

Government-subsidized insurance is a key enabler for FCV to serve low-income people. Colombia's national health plan covers 90% of the population. The Contributory Regime (CR) Plan serves the formally employed earning the minimum wage and above. Alongside their employers, these employees make payments through payroll deductions to a single pooled fund that also receives federal funding. The Subsidized Regime (SR) Plan serves the informal sector, the unemployed, and people from indigenous and other vulnerable groups. It is funded through CR contributions (1.5%) and taxes. Over 50% of the covered population falls under the SR. CR participants affiliate with a health plan offered by insurance companies known as *Empresas Promotoras de Salud (EPSes)*. Cities and towns receive funds to contract with specific EPSes for SR participants. Insurance companies, in turn, contract with public or private health care providers to offer services to plan participants.

Revenue Model

FCV is a vertically integrated company—it has several business units in Bucaramanga that manufacture, assemble, procure, or provide products and services for its hospitals to reduce costs. These products and services are also sold to hospitals, government and private clinics, and independent health practitioners to generate revenue. The business units are: *Telemedicina* for telemedicine services; *Productos Hospitalarios* for manufacturing hospital products (gowns, sutures, tissue, etc.); *FCV Soft* for hospital software (accounting, clinical history, quality indicators, etc.); and *Bioingeniería* for assembly of bioengineering equipment for ICUs and NICUs as well as portable equipment for telemedicine (EKG, vital signs monitors, radiology). In addition, FCV offers pharmaceuticals import, hospital design and construction, medical transport, and training.

Apart from the above revenue sources, FCV is reimbursed by insurance companies per government-regulated tariffs for services to insured patients. As a foundation, FCV has no shareholders and reinvests all its net income. However, FCV's new hospital in Floridablanca will be for-profit as permitted by a recent law.

Telemedicine Services

FCV is expanding its reach to low-income patients in remote areas through telemedicine. Its innovations are increasing the efficiency of the health system by reducing referrals to city hospitals, facilitating retention of general practitioners (GPs) in small towns, and cutting costs for both hospitals and patients.

Low-income people often don't seek specialized health care because they have to spend time and money to access services in big cities. Through telemedicine, independent GPs or doctors in hospitals outside of FCV's network gain access to real-time advice from FCV specialists. While directly benefiting patients, telemedicine offers GPs in remote areas a way to acquire additional knowledge. FCV's offerings include tele-consultations; tele-radiology and EKG through which images and data are transmitted to FCV specialists for interpretation; and tele-ICU. The latter is the only one-of-its-kind in Latin America. FCV doctors remotely monitor patients in ICUs at out-of-network hospitals and advise on a course of action. This service helps reduce costs and risks associated with transferring patients between hospitals.

FCV's communications center, web-based portal, and software solutions facilitate the smooth functioning of telemedicine. The company assembles equipment for electronic transmission of patient data between consulting and referral doctors. Examples include a mobile diagnostic unit for consultations including EKGs, a mobile ICU for monitoring vital signs and other indicators, and a handset for scanning images for tele-radiology. FCV also uses digital patient records in its own hospitals and for telemedicine patients, improving patient tracking over time.

EPSes reimburse doctors' fees based on patients' health plans. GPs in small towns are paid a fee proportional to the service provided directly, while FCV specialists are paid a fee based on the time spent on remote consultations. In many cases, FCV provides the telemedicine equipment for a fee. A collaboration with the government is enabling free telecommunications for telemedicine in frontier regions.

To expand its reach and ensure timely intervention, FCV is piloting a digital health system in Bucaramanga with the government. The aim is to connect health care professionals at government-run primary health care centers to tele-based expertise and diagnostics at specialized facilities including FCV hospitals. FCV aims to roll-out the system to small cities post pilot in 2015 and will act as a service provider to the government, earning additional revenue.

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DRIVERS FOR FCV'S INCLUSIVE BUSINESS MODEL

- Market opportunity to provide tertiary health care services in small and mid-size cities
- New law stipulates that the same health benefits must be provided for all citizens, creating room for growth of private sector hospitals
- Need for greater availability of high complexity services as the population ages
- Availability of government-subsidized insurance for low-income people

Upper middle income countries have an average of 37 hospital beds per 10,000 population, while Colombia has 14 beds per 10,000¹. Further, the country has 23 large high complexity hospitals offering an estimated 4,700 beds; these hospitals are mainly concentrated in big cities such as Bogota, Medellin and Cali. FCV thus has a market opportunity to provide tertiary health services in small and mid-size cities, especially in the north eastern Caribbean coast of Colombia. In 2012, a new law came into effect stipulating that all citizens must receive the same health care benefits irrespective of the type of insurance they hold. In this context, private sector providers like FCV have an increasingly critical role to play in expanding availability of quality health care for low-income patients especially in underserved regions.

Apart from insufficient availability of high complexity services in small cities, Colombia must prepare for the challenge of an aging population. According to a United Nations Report, 9% of the population was over 60 years old in 2011 and this is projected to increase to 25% by 2050. This demographic transition creates a need for greater availability of high complexity services as older people require treatment for chronic conditions and non-communicable diseases.

Finally, a key enabler of FCV's business model is the availability of subsidized insurance for low-income patients. Without access to such insurance, it would be challenging for FCV to serve low-income patients in a financially sustainable manner.

RESULTS OF FCV'S INCLUSIVE BUSINESS MODEL

- An estimated 45% of patients served annually at FCV hospitals are low-income
- More than 2,800 telemedicine patients served between 2011 and 2013
- Telemedicine services to 48 hospitals in rural areas and over 200 independent general practitioners in remote villages

FCV serves more than 150,000 patients each year, of which approximately 45% are in the low-income category. Between 2011 and 2013, FCV served over 2,800 patients through telemedicine. The company works with 48 hospitals in rural areas with populations of less than 3,000 and over 200 independent GPs in 76 frontier regions to provide tele-consultations. As a result, 75% of patients served did not need referrals to city hospitals.

Apart from tele-consultations, FCV is offering its tele-EKG to 60 hospitals and tele-ICU services to 22 hospitals. Since 2005, over 7,500 patients have availed of its tele-EKG and tele-ICU services. Infant mortality has dropped by over 70% in the hospitals linked to the tele-ICU program over the past four years. FCV has also trained over 770 health care professionals in 23 states. FCV estimates that its telemedicine services have

created savings of \$10.5 million over the past two years for the government, insurance companies, hospitals and patients through reduced cost of transportation, logistics and mobilization, staff, and other areas.

The company has collaborations including with the Children's Hospital of Pittsburgh of UPMC in the United States, Universidad de Sao Paulo and Universidad Federal de Sao Paulo in Brazil, and University of Toronto in Canada for training doctors and patient exchanges. FCV is also co-managing its pediatric cardiovascular ICU with the Children's Hospital of Pittsburgh of UPMC. In 2009, FCV's hospital in Bucaramanga was the first in Colombia to receive international accreditation for meeting various quality and safety standards by the Joint Commission International (JCI).

IFC'S ROLE AND VALUE-ADD

- Provide long-term debt financing which is not readily available for health institutions from local commercial banks
- Enable construction of new 468-bed hospital in Floridablanca in Santander, thereby reducing the bed deficit in this region, which is below the national average
- Enable FCV to expand capacity in existing hospitals by 600 beds
- Facilitate additional third-party debt financing through Bancolombia, a leading private bank in Colombia
- Enable access to IFC's network of health care clients in Latin America and other regions



IFC's Investment:
\$30 million in long-term debt financing

Investment Year:
2012

¹ World Health Statistics 2012, WHO. Data for 2005-2012