

Transforming children's healthcare in Brazil by using Connected Collaboration and Cloud Computing to help improve access to specialty pediatric care



The issue

For the more than 41 percent of Brazil's infants and children under 19¹ who live in the remote North and Northeast regions, long travel times and distances pose barriers to specialty care, since most specialists are based in cities in the South.



By improving access to specialized pediatric care, the goal of the Sergipe advanced clinical collaboration and Telemedicine pilot is to help improve the quality of care for children with common and rare diseases.

Children with healthcare issues often require specialty care, but in Brazil, where much of the population lives far away from urban centers with larger public hospitals, children and their families often have to travel long distances to get adequate care. This can mean a loss of income for the parents, and that in turn can increase the state's share of healthcare costs. A pilot program in the rural and sparsely populated state of Sergipe will use Cisco's collaboration and cloud technology to help improve access to pediatric specialists and, at the same time, help care teams improve the quality of care.



Networks

Human Networks:

Care providers at hospitals and family clinics in Aracaju, Lagarto, and Tobias Barreto, the UFS Medical School, children, families

Technology Networks:

Cisco TelePresence®, cloud computing, network applications, Cisco WebEx® and Cisco Jabber® collaboration technologies



Why Sergipe?

This small state, underserved for children's healthcare specialties, has expertise and willing champions to help drive transformation and will serve as a model for other states to follow.



0 Pediatric Subspecialists

are on staff at family health clinics in Tobias Barreto and Lagarto, so children must be served in other locations



100% of Municipalities

are covered by family health teams who reach 84% of the state population² (4th best coverage in the country), so Sergipe is an excellent place to drive innovation with virtualized access to specialized care



1 Medical University

in Sergipe, established in 2009 as a start-of-the-art facility, will be the site for core infrastructure and a source of continuing medical education services

¹Brazilian Institute of Geography and Statistics

²Brazil Ministry of Health

you + networks = impact^x



The Issue

Brazil has a publicly funded health program, called Universal Health System (SUS), which includes roughly 6,500 hospitals, mostly in urban areas, and about 34,185 family health teams that cover 95 percent of municipalities³. The public hospitals often have little or no infrastructure for information and communications technology (ICT), and the family health clinics are not always well integrated with public hospitals or medical centers of excellence. Also, 36 percent of the population lives in the North and Northeast, but pediatric specialists are concentrated in cities in the South, where there are, on average, four times as many doctors per capita⁵.

Human Networks

The Cisco Connected Healthy Children program in Brazil combines the efforts of care providers, the Federal University of Sergipe (UFS), members of the Ministry of Health, and Cisco networking experts to help improve the quality of care for children. The Brazilian government has made it a top priority to improve the quality and accessibility of care for its citizens, and children's healthcare is a primary focus of Cisco's Corporate Social Responsibility (CSR) programs. Regular medical care has been shown to allow early diagnosis and treatment, especially for chronic diseases, and can significantly improve mortality rates for children under age five. Poor health causes developmental delays, affecting children's ability to learn or reach their full potential, and sick children exact a heavy toll from parents and families as adults are drawn away from jobs⁶.

"This program will help technology serve people. Children will get immediate, specialized consultations where they live. Mothers, fathers, children - their daily lives can continue without interruption."

- Angelo Roberto Antonioli, president,
Federal University of Sergipe

More Information

To learn more about Cisco and the Connected Healthy Children project in Brazil, please visit: csr.cisco.com

Technology Networks

The pilot program in Sergipe will leverage the Cisco TelePresence[®] videoconferencing service, and network-based collaboration technologies such as Show and Share[®], WebEx[®], and Jabber[®]. These technologies will be used to connect patients at family health clinics to specialists in larger medical centers, so children can see a far-away doctor without leaving their own municipality. These technologies will also connect clinicians in remote areas to experts and content at university sites and other centers of excellence. Being able to collaborate with offsite specialists and having access to continuing medical education can help increase the knowledge and training of local care teams and improve their decision-making.

Impact^x

The goal of the Sergipe pilot, which builds on best practices from similar programs around the world, is to help improve the quality of care for children with common and rare diseases, and could establish the Latin American hub of an international children's healthcare network.

³ Society of Actuaries in the article Brazilian Private Health Care Market—Ready for Liftoff, by Ronald Poon Affat, that appeared in the Society of Actuaries International News, January 2012, Issue No. 55.

⁴ Brazil Ministry of Health

⁵ Census 2010, IBGE

⁶ World Health Organization

csr.cisco.com



Cisco Corporate Social Responsibility

We believe that businesses have a responsibility to operate in ways that respect and ultimately benefit people, communities, and the planet we live on; we call this Corporate Social Responsibility (CSR). Our core CSR philosophy is that impact multiplies whenever human and technology networks combine to solve a problem.

This is why we approach CSR the same way we approach business—by applying our technology, employee expertise, and partnerships. We are focused on four primary goals: improving the well-being of people and communities around the world, reducing our environmental impact and helping our customers do the same, conducting our business ethically, and creating a workplace where our employees thrive.