



Your On Demand Medical Exam

CASE STUDY:

Chile Rural Health Care

TytoCare and local distributor Vitaltec succeed in bringing healthcare to remote, under-served community of San Bernardo



The Challenge

Although a 2019 OECD Public Health Report opens with a statement that *“Chile has a well-functioning, well-organised and effectively governed health system and public health architecture,”* not all citizens benefit from it; the challenge is one of geography. Nearly 80% of Chile’s landscape is made up of rugged mountains, and most

of its population lives in or near them. In addition, Chile is a long, thin country with more than 6,000 km of coastline, but a width averaging just over 100 km, its capital city of Santiago in the center.

It is no surprise, then, that almost 60% of doctors and over 40% of the hospital structure are concentrated in the central part of the country. As the remainder of its communities are practically isolated, it has always been



a challenge for its citizens to access even basic healthcare services; the lack of human resources and the tools and technology required in a medical environment means that even a simple checkup requires long, harsh travel. And for patients needing specialized care or surgery, this long trip can also be followed by years on waiting lists overflowing with patients. As such, that initial checkup is critical to get the process started.

With the challenges of COVID-19, the problem is amplified - with no easy way to have flu-like symptoms confirmed and the patient put into quarantine, this isolation becomes a critical, life-threatening issue like never before.

The Solution

Around the world, the typical solution for long-distance care in remote rural villages often begins with teleconferencing: A video call allows a doctor to interview a patient, see the most obvious symptoms on screen in low resolution (assuming these are

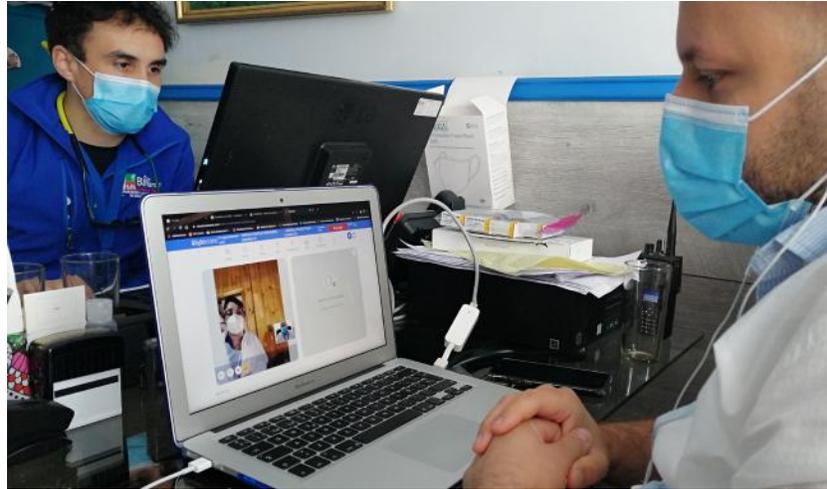
external and visible), provide a diagnosis, and somewhat awkwardly do their best to recommend next steps ... all without reliable exam data. And this is a best-case situation for classic telehealth. However, many of these communities do not have the basic technological tools for even a simple video call, with its limited benefits.

The Municipality of San Bernardo, a rural area with a population of 350,000, sought a solution where they could somehow send trained nurses or junior medical personnel to these remote locations, carrying with them a full complement of diagnostic tools otherwise provided only in a clinic environment.

They turned to Vitaltec, a healthcare provider who represents and distributes TytoCare products in Chile, to create the "Let's Spread Health" program.

The Tyto examination platform - in use in countries throughout Europe, Asia, the Americas, and beyond - provided the core





technology for the campaign. Approved by both the FDA and CE, Tyto includes a handheld device with hardware and AI-driven software for examining the heart, lungs, throat, skin, ears, and body temperature, with earbuds for enhanced audio. Tyto can be used for diagnosing acute conditions such as cold, flu, ear infections, bronchitis, and sore throats, and for monitoring and managing patients with chronic conditions such as high blood pressure, asthma, COPD, congestive heart failure (CHF), and diabetes. The camera built into the device can photograph skin conditions, rashes, and bites and forward these images to a specialist. All data is stored on a mobile device for later reference and follow-up or can be forwarded instantly to a clinician for consultation.

Results

Vitaltec armed a group of nurses with its rugged, portable TytoPro kit, designed for use

in exactly these scenarios. In a trial program running for three days this past September, the medical teams travelled door to door, making 230 visits to over 300 patients from 100 families in the remote village of San Bernardo, and performed much-needed checkups. The goal was to visit families who had not received medical attention of any kind for over a year. They identified both simple and more chronic or serious conditions, sharing them with specialist consultants, when needed, to diagnose or treat specific maladies. They met children who had never been to a doctor, older patients with serious, treatable who were not getting timely care, and chronic sufferers who would otherwise have waited a year for any medical consultation.

The majority of the diagnoses were for diabetes and cardiological issues ... a predictable outcome in a country fighting an obesity epidemic. 80% of the patients were over age 65, and 20% over 80. The nurses were able, often without further consultation, to





recommend adjustments to existing treatments, medical prescriptions, or exercise regimens.

According to David Batikoff, CEO of Vitaltec, "We have a list of 1,689 patients in this region who are registered for home care, but the system simply isn't able to send clinicians to visit more than once a year. With Tyto, we will visit 100% of the list once a month, spending only about 30% of the total budget. As there are not enough doctors, and expenses are too high to pay them to visit a poor municipality, we will use trained nurses to bring the patients to the doctors, virtually."

"It was very touching," adds Batikoff, "To see how the people reacted. The most common response when we knocked on the door was astonishment. They asked what they had done to deserve a private visit. It was hard for them to grasp that as a citizen of Chile, this was their right."

One of the nurses on the team saw this delight first-hand: "Patients were nervous at first, but as everything went smoothly, patients loved being treated by specialists. They were so accustomed



to having to travel for hours - in the best case - and then at the hospital waiting an additional 3-4 hours. Especially for chronic and disable patients, imagine their happiness not needing to travel far from home... and to receive an even better consultation than they were accustomed to!"

Batikoff predicts that, based on the success of the program, they will see an expansion of the program to other Chilean villages.

“In our community, there are other groups with the same or worse circumstances, so we are eager to begin there and scale this project with Vitaltec and Tyto ... We invite to all municipalities and governors to try out the implementation of these devices and leverage telehealth to keep costs down and give citizens the quick attention they need.”



Dr. Lorna Suazo
Head of Health
Municipality of San Bernardo



For more information about Tyto Care Professional programs for Health Systems, please visit [tytocare.com](https://www.tytocare.com)

