

Digitalization is helping a Chilean Clinic to provide patient-centered healthcare far from the capital city





When Clínica Costanera partnered with Siemens Healthineers to create a cutting-edge imaging center, the new equipment also inspired a digital transformation. A new platform makes sharing medical data easy and is bringing the clinic as a whole into the digital age. Working within the ecosystem of Siemens Healthineers, Clínica Costanera has developed tools to better serve the needs of its patients, its physicians, and the wider healthcare system.

línica Costanera is located in Valdivia, a city that sits around 800 km south of the capital, Santiago de Chile.
Opened in 2009, the clinic provides healthcare to roughly 6,000 patients every month through its four main service lines:
Outpatient Surgery, Outpatient Consultation and Procedures, Imaging, and Lab Sampling. It is close to achieving the milestone of 20,000 surgical interventions, and will soon be celebrating the first anniversary of its modern new headquarters. Its team of 140 staff are all dedicated to providing exceptional healthcare services to residents of Valdivia and the surrounding region.

Vision: High-quality, affordable healthcare for the local community

Chile's major hospitals and healthcare facilities are located in Santiago. But traveling the 800 km to access that care is difficult or impossible for many people in Valdivia: Flights are expensive, and bus or car trips take around 10 hours. Even if they can afford the cost and time of the journey, a person's medical condition itself can rule out travel.

Clínica Costanera wants to provide residents of Valdivia and the surrounding region with the same level of healthcare they would get in Santiago. And it aims to make this as affordable for patients as possible. "We're aiming to become a reference site and take care of our people here," says Alvaro Andrés Figueroa Roig, CEO of Clínica Costanera, adding: "Our goal is to treat 90% of illnesses at the right cost."

This vision led the clinic to begin supporting the public health system, which was struggling with a shortage of infrastructure and personnel. "We wanted to serve the public and shorten the long waiting lists we have in the country," says Chief Medical Officer and Chairman of the Board Raúl Eduardo Cañoles Ramirez.



It also led to a decision to establish a cuttingedge medical imaging center at the clinic. Valdivia is an important location for cancer diagnosis and treatment in Chile. By offering excellent imaging technology, Clínica Costanera would be able to provide the local population with high-quality cancer care and consolidate the city as a leading oncology hub for the region.

Equipping the center with modern systems would also serve the clinic's vision of providing high-quality healthcare to local patients, as well as making it more attractive to talented physicians who would otherwise gravitate toward the well-equipped hospitals of Santiago. A clinic staffed with excellent care teams has a huge impact on both patient care and patient loyalty.



Imaging partnership leads to digital transformation

The plans for the imaging center brought Clínica Costanera and Siemens Healthineers together in 2021: "We were looking for the best technology in the world, and that led us to Siemens Healthineers," says Raúl. Part of the partnership was to bring PET/CT to the clinic. This was a significant advantage for many patients, as the only other option previously was to travel to Santiago.

Clínica Costanera was now able to perform many more imaging examinations. However, this brought new issues to light: On the one hand, managing the new imaging results and reports with the clinic's existing systems became challenging. On the other, the clinic needed a way of securely sharing the information with public and other private providers, in order to fulfill its vision of a better healthcare system for everyone.

In addition, the clinic didn't have any way to collect data about which patients were visiting when, and for what type of appointments. Although the management knew that roughly 6,000 people were visiting each month, there was no real transparency about who these people were: "We didn't know if they were the same people, or different people coming just once," says Alvaro.

These gaps in information extended to data about operational efficiency, staff productivity, and system utilization. Without transparency in these areas, it's hard to optimize the service in terms of both care provision and costs.

"In that sense," says Raúl, "we needed a powerful digital transformation to be able to meet the requirements of both the public health system and our own private system." The aim was for information to flow across a reliable, high-tech platform that was fast and had reliable backups.

The right partner for the digital transformation

Given the existing imaging collaboration with Siemens Healthineers, it made sense for Clínica Costanera to engage the same company for the digital transformation. But convenience and technical expertise weren't the only reasons for the choice:

"The response from the entire Siemens Healthineers Chile team to this project – which is just a small clinic, but a very ambitious one from a technological point of view – has always been one of support and trust. I believe companies are made of people, and it's a pleasure to work with the team at Siemens Healthineers," says Raúl.



"If you can connect all the players, all the systems to our patients and clients, that's a real gamechanger."

Pablo Andres Martinez Lozano
IT Director at Clínica Costanera

Solutions

The eHealth Solutions interoperability platform from Siemens Healthineers supports a more connected healthcare system: It enables the seamless, secure access and exchange of information within and across organizations by harmonizing and aggregating data – all while helping to protect patient privacy.

Healthcare providers can then transform the data into insights with the potential to improve outcomes and decision-making. And because the platform allows interoperability across institutions and sectors, providers can boost operational efficiency and clinical effectiveness.

"If you can connect all the players, all the systems to our patients and clients, that's a real gamechanger," says Pablo Andres Martinez Lozano, IT Director at Clínica Costanera.

Driving Collaborative Outcomes for patient care

The digital transformation is bringing immense benefits to the clinic, its patients, and its physicians. The ability to gather data and share it securely with other pro-

viders via the platform makes Clínica Costanera much better positioned to achieve its goal of improving the healthcare system for everyone.

Having access to data about physician work-loads and system utilization also means "we'll be more efficient in the use of our equipment and our human resources," says Raúl. Pablo agrees: "We can generate reports to measure our productivity and operations, and modify care pathways accordingly to improve outcomes." This will help the clinic streamline services, shorten waiting times, and provide a more cost-effective service overall – all of which are key to providing quality, affordable care outside of Santiago.

It also paves the way for operating more strategically: "The clear visualization of data, patient statistics, and information about





"The clear visualization of data, patient statistics, and information about our physicians' workload will help us to build our strategy for patient engagement and physician productivity in the coming years."

Alvaro Andrés Figueroa Roig

our physicians' workload will help us to build our strategy for patient engagement and physician productivity in the coming years," says Alvaro.

As for the patients, they now have easier access to their medical information. Even if they have to go elsewhere for treatment or a test, they always have their data to hand. "This will often allow patients to save costs and avoid duplicating exams, and it will reduce radiation exposure by removing the need to repeat scans," explains Raúl.

And because the platform speeds up data exchange, patients will spend less time waiting for results: "We'll be able to deliver information faster, both to the patients directly and the health centers treating them. Patients will get faster responses, faster diagnoses, and faster and more accurate treatment decisions," explains Raúl.

The eHealth Solutions platform is also boosting confidence and loyalty among patients and physicians: For patients, sophisticated technology reassures them that they are in good hands, even outside of Santiago. For physicians, it creates an attractive work-

place that doesn't require them to move elsewhere: "It will convey a level of confidence in our services and in the quality and capabilities of the clinic, which will probably create greater loyalty among our patients, our doctors, and the whole health system in general," says Raúl.

Another benefit is that eHealth Solutions allows physicians to access a patient's full health data in a single view. This means they are fully informed about the patient's health status during an appointment, which creates a sense of trust and enhances the physician-patient relationship. "Clear information makes us better organized in



our internal processes and for our stakeholders. Better insights make us more efficient and better workers," says Pablo.

Care teams, too, benefit from more efficient workflows, as staff are now spared the time-consuming burden of tracking down information contained on CDs or in individual spreadsheets. Again, this makes the clinic a more attractive place to work, which can help engage and retain skilled staff to deliver a quality service to patients.

Outlook: Access to care with focus on cancer prevention

Implementing a digital transformation within the ecosystem of Siemens Healthineers is helping Clínica Costanera meet its own requirements and those of its patients and providers in a much more efficient manner. It can easily and securely share medical information across different systems, gather key data about its own activities and patients, and be an attractive, trustworthy provider or employer for patients and physicians.

The platform will also support the clinic in progressing on its long-term goals: Clínica Costanera wants to become Chile's number one diagnostic imaging center for cancer, particularly leukemia. "We really want to support this community by helping them to prevent cancer or access care more easily," says Alvaro, adding that, to do so, it will require "the best imaging and information technology."

Thanks to the imaging devices and eHealth Solutions from Siemens Healthineers, Clínica Costanera is now well positioned to achieve this.

Building on the digital transformation, Clínica Costanera aims to transition to a paperless clinical record system by the end of 2023, set up analytics systems, and use cloud-based omnichannel tools to provide faster, higher quality responses to its patients.

Going forward, the clinic will continue to leverage the power of technology and innovation so it can keep giving its patients new and better ways to engage with its services.

"We'll be able to deliver information faster, both to the patients directly and the health centers treating them. Patients will get faster responses, faster diagnoses, and faster and more accurate treatment decisions."



Raúl Eduardo Cañoles Ramirez Chief Medical Officer and Chairman of the Board of Clínica Costanera eHealth Solutions consist of several products. eHealth Virtual Visit is manufactured by Siemens Healthineers, Erlangen, Germany. All other products of eHealth Solutions are manufactured by ITH icoserve technology for healthcare GmbH – A Siemens Healthineers Company, Innsbruck, Austria. Products of eHealth Solutions are not intended for diagnostic purposes. The product offerings are not commercially available in all countries. Please contact your local Siemens Healthineers organization for further information.

The statements, data and statistics were provided by the customer of Siemens Healthineers. What were described herein are based on results that were achieved in the customer's unique setting. Because there is no "typical" hospital or clinical institution and many variables exist (e.g., hospital size, samples mix, case mix, level of IT and/or automation adoption) there can be no guarantee that other customers will achieve the same results.

Siemens Healthineers AG

Siemensstr. 3 91301 Forchheim Germany

Phone: +49 9191 18-0 siemens-healthineers.com