Customer Case: CENTRO DE ESPECIALIDADES MÉDICAS AMBULATORIAS (CEMA), MAR DEL PLATA, ARGENTINA

New diagnostic center strengthens healthcare network and enables more effective care across municipality

Completely digital approach aligns with government's aim to evolve towards preventive healthcare

INTERVIEWEES Dr. Alejandro Cristaldi, General Manager · Germán Giles, Medical Technology Director

Unlike other health service models in Argentina, the Centro de Especialidades Médicas Ambulatorias (CEMA, Center of Specialized Ambulatory Medicine) was designed to be completely digital, right from the start. The objective for CEMA was to support the 32 Centers of Primary Healthcare of the General Pueyrredón Municipality, along with two provincial hospitals. Through its specialized diagnostic technology and healthcare professionals, CEMA serves as a key link between the first and third levels of the healthcare system, optimizing healthcare in the public sector.

The city of Mar del Plata, Argentina's most important tourist center, is located on the Atlantic coast, about 400 kilometers south of the capital, Buenos Aires. CEMA, the area's newest and most technologically-advanced diagnostic center, opened its doors there in late 2012. Designed to provide medium- and high-complexity diagnostics to inhabitants of the region, CEMA will serve up to 1,500 patients per day.





"Our completely digital site is perceived as a benchmark for healthcare in Latin America."

DR. ALEJANDRO CRISTALDI. General Manager

This state-of-the-art facility features the latest ecologically-sustainable building materials and systems, and was funded by Argentina's national and provincial governments. Dr. Alejandro Cristaldi is General Manager of CEMA, and also Undersecretary of Municipal Health. "This project, included in the municipal healthcare system, was designed by mayor Gustavo Pulti, and Dr. Alejandro Ferro, Secretary of Municipal Health. We are very pleased with the building's design," he says, of the 6,200 square meter, three-storey purpose-built center. "But I always say that CEMA's main asset is its informatics profile."

SHAPING THE PROJECT PROFILE

Once Agfa HealthCare was awarded the contract, it helped to shape that project profile from the earliest stages of implementation. Local government administrators turned to Agfa HealthCare experts to help define the technology and workflow requirements. "The local team from Agfa HealthCare was of inestimable value during the process of the project, as they offered different types of specialized knowledge to help identify the specific needs," says Germán Giles, Medical Technology Director at CEMA.

Most of the examinations performed at CEMA are in the areas of CT, MRI, X-ray, ultrasound, echocardiography, and mammography. Patients are referred by physicians at any of the 32 primary healthcare centers in the municipality, which could be up to 30 kilometers away. Before CEMA, there were only four centers in this system providing

conventional radiology. Now, there are seven centers in the network providing digital radiology, around the clock, and the images from these health centers are read in real-time by the radiologists at CEMA.

DIGITAL PATIENT RECORDS IMPROVE SECURITY AND MINIMIZE DUPLICATION

The changes in the way healthcare is managed in the municipality go way beyond this improved use of radiology resources. Before CEMA started operations, all patient information for the municipality was handled on paper, including medical records, radiology films, etc. Now, this information is managed digitally. Once the patient is checked in, the system receives their demographics and personal details, so there is no need to transcribe the patient's personal information or re-perform imaging studies, improving patient security and minimizing exam duplication.

"The digital solutions from Agfa HealthCare play a central role at the center, helping us to meet our goals for high-quality diagnostics and for connectivity," says Germán Giles. The center uses a range of CR solutions from Agfa HealthCare, including the CR 30-X, CR 35-X and CR 85-X. It started with CR to be able to use the analog radiology equipment in place in the primary healthcare centers, and also because CEMA received some analog



mammography equipment as a donation from the Buenos Aires province. Radiology workflow is managed with an IMPAX RIS/PACS solution, and the center also uses iPlan, Agfa HealthCare's internet-based enterprise scheduling and planning solution.

TECHNOLOGY TO ENABLE PREVENTIVE HEALTHCARE

In addition to all of the efficiency improvements that the technology enables, there are also important gains being made in the area of preventive healthcare. The network makes the solutions more widely available, and it also grants access to a wider professional offer. Day by day, as the project

grows, physicians, technologists, and administrative staff are being added to the network.

This is making a significant impact on the health of the population. Because they have access to more equipment and professional expertise, diseases may be diagnosed faster. Healthcare providers are working with health protocols that determine what studies are needed, and how to make the best use of the facilities and all the solutions both in the CEMA and the health centers. "This is generating a major cultural change, not only from the technology point of view, but also on the medical side by standardizing processes of patient care," says Dr. Alejandro Cristaldi.





The project tender required that the IT solutions proposed for CEMA be based on the Project Management Institute (PMI) and its high project standards, to specify baselines for the implementation schedules, the staff needed and the hardware necessary to start this project. According to Dr. Cristaldi, Agfa HealthCare's solutions not only complied with the standards required by the municipality; they also offered a very attractive economic proposal, which facilitated the decision when assigning the tender.



The implementation was very structured, and broken into steps, including progressive training steps. This was helpful because the staff members were starting from a variety of perspectives, e.g. the staff at CEMA were more easily trained because they were all new; meanwhile at the health centers the staff were used to working with conventional radiology solutions and protocols.

BENCHMARK FOR CARE IN LATIN AMERICA

As the first site of its kind in the country to be developed as completely digital, CEMA is a model of efficiency and cost-effectiveness. This pilot project is being analyzed so it can be duplicated not only in the province of Buenos Aires, but in other municipalities in Argentina as well. "It is perceived as a benchmark for healthcare in Latin America," concludes Dr. Cristaldi. •



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AGFA HEALTHCARE'S CONTRIBUTION

- » Recognized across Latin America for healthcare technology and expertise
- » Strong local team provides support and knowledge at all stages in the process
- » Focus on integration for more efficient provision of healthcare

SULTITIONS

CR 30-X

» Compact, tabletop digitizer for Computed Radiography where space is limited or in mobile environments

CR 35-X

» Supports a broad range of applications and provides significant results to facilities experiencing a high volume of spinal examinations among other common orthopaedic exams

CR 85-X

» Multi-user, multi-application digitizer with compact footprint, for centralized Computed Radiography environments

IMPAX PACS

» Next-generation PACS, streamlines enterprise workflow and delivers increased efficiency and productivity

IMPAX RIS

» Electronically manages radiology operations, from patient registration through worklist generation and transcription, to medical reporting and business intelligence

iPlan

» Internet-based enterprise scheduling and planning solution

DID YOU KNOW...

- » Mar del Plata is the seventh largest city in Argentina.
- » In the early 20th century inhabitants of Buenos Aires began to come to Mar del Plata as a holiday resort, and it is the biggest seaside beach resort in the country today.
- » It is the most popular destination for conventions in Argentina, after Buenos Aires.

