



OPPORTUNITY

Chile's surgical waitlists and backlogs grew, even as budgets increased.

INNOVATION

An interoperable, AI-based platform, SITGEQ, made the needed breakthrough in surgical resource utilization and planning.

SOLUTION

In real time, SITGEQ matches a complete inventory of available surgical resources with patient needs, preferences, and surgery waitlists, resulting in data-driven scheduling.

IMPACT

Surgical productivity has dramatically improved across Chile, with far fewer surgical resources left unused and surgery more accessible and timely.

GesNova Salud Introduces an AI-Powered, Integrated Surgical Management Platform

Chile's public healthcare system faced a critical paradox: funding had surged—growing by nearly 80% over a decade—yet productivity declined, creating massive surgical backlogs and preventable patient harm. Hospitals operated in fragmented silos with limited interoperability and little access to real-time data, making coordinated decision-making nearly impossible. A powerful opportunity emerged to reimagine surgical operations as a fully integrated system rather than a series of disconnected events. By leveraging AI, interoperability standards, and cross-institution collaboration, GesNova Salud identified a path to transform inefficiency into coordinated, data-driven care delivery—unlocking productivity gains without requiring additional budget growth.

SITGEQ: Matching Surgical Resources to Demand with Interoperability and AI

The Territorial Surgical Management System (Sistema Territorial de Gestión Quirúrgica, or SITGEQ) is a comprehensive digital platform that integrates all elements of surgical care—from patient intake to postoperative coordination—into an intelligent ecosystem. It captures real-time data on personnel, operating rooms, equipment, and patient needs, creating a dynamic, end-to-end view of surgical capacity. Using this unified dataset, SITGEQ optimizes surgical schedules to align resources with demand. At its core, SITGEQ leverages machine learning models developed in partnership with academic experts to continuously refine scheduling, predict surgical durations, and recommend resource allocation strategies. Leveraging **InterSystems IRIS for Health**, **TrakCare**, and **Health Connect**, the platform works through an interoperable infrastructure aligned with national HL7 FHIR standards, ensuring seamless data exchange across systems. This combination of AI and interoperability enables smarter, faster, and more transparent decision-making at every level of the healthcare system.

“When you have the opportunity to connect each hospital and each region, you can look at the problem from a much bigger perspective. Through the use of technology and interoperability, we can guarantee higher quality treatment while increasing productivity.”

The GesNova Salud Team

Improving Access, Reducing Waitlists, Accelerating Surgical Care

The SITGEQ innovation has delivered measurable, high-impact results in early pilots, including a 20% increase in operating room utilization and a 25% improvement in patient satisfaction. Hospitals are performing more surgeries per day, directly reducing waitlists and accelerating access to life-saving care for underserved populations. Beyond operational gains, the platform is driving systemic change by enabling real-time decision-making across entire regions. It improves equity by allowing patients to access care beyond their assigned hospital, while also creating a scalable model for national and international healthcare transformation.

- **End-to-End Surgical Orchestration** unifies every stage of the journey, from diagnosis through recovery, into a single workflow. Without fragmentation, all stakeholders operate from the same real-time information. Coordination improves dramatically, and delays are reduced.
- **AI-Driven Scheduling Optimization** analyzes historical and real-time data using advanced machine learning to recommend schedules. These models account for staff availability, procedure duration, and equipment constraints. Operating room use is maximized and surgical throughput optimized.
- **Interoperability at National Scale** integrates multiple hospital IT environments using HL7 FHIR, enabling seamless data exchange. Previously siloed systems connect into a unified ecosystem with shared visibility, creating a scalable foundation for regional and national healthcare transformation.
- **Real-Time Decision Intelligence** gives healthcare leaders instant access to actionable insights through real-time dashboards and analytics. This visibility allows for rapid intervention, resource reallocation, and proactive problem-solving. Decisions shift from reactive to predictive and strategic.

About the Winner: GesNova Salud S.A.

GesNova Salud is a forward-thinking healthcare technology organization dedicated to transforming public health systems in Chile through intelligent, data-driven innovation. The company partners with hospitals, government agencies, and academic institutions to solve complex operational challenges at scale. By combining interoperability, artificial intelligence, and real-time insights, GesNova Salud is redefining how care is delivered across the country's regions.

About the InterSystems Impact Awards, Selected by an MIT Panel

Each year select client organizations are recognized at the InterSystems READY conference for projects driving positive change. Nominations are evaluated by independent judges from MIT on three criteria:

- **Makes a meaningful difference**
- **Breaks new ground**
- **Sets an example**

To learn more about the InterSystems Impact Awards visit

<https://www.intersystems.com/intersystems-impact-awards-2026/>