

GAETANO PINI

S U C C E S S S T O R Y



Italian Hospital Uses SGI to Provide Public Access to Critical Healthcare

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– *Adelio Schieroni,*
Leader of the data processing center and strategies and policies group,
Gaetano Pini Institute

Two of the most significant trends in healthcare today are improved access to healthcare information and better integration among public health systems. Gaetano Pini Institute in Milan, Italy has taken its place in the forefront of these movements, with the recent development of its healthcare extranet, a network that links professionals, social services, organizations and citizens to provide them with access to medical, emergency and social services.

The healthcare extranet, developed in compliance with an innovative project known as the Regione Lombardy Regional Service Chart-Health Partners Data System (CRSS-SISS) initiative, makes it possible for patients to securely access their medical records, tracking all events and treatment in their healthcare history.

The ambition of the Gaetano Pini hospital was greater than just introducing a disaster recovery system. It was to build a 360-degree data handling system that would be capable of supporting all hospital activities with a complex ERP (Enterprise Resource Planning) System.



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Pioneers in Leveraging Technology

In developing its healthcare extranet, the hospital is building on an established tradition of leadership in tapping into technology innovations to deliver the highest level of health care service to its community.

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With that history of success, it was logical that when Gaetano Pini Institute determined that it needed a company-wide repository to connect an external network as well as to implement a disaster recovery system, it turned once again to SGI.

Designing and Supporting a New Infrastructure

The CRSS- SISS and EUOL projects required the creation of a new infrastructure with an open platform that would allow the integration of systems serving the two programs. This entailed building a comprehensive data handling system capable of supporting all the hospital’s workflows through a complex Enterprise Resource Planning (ERP) system.

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– Laura Colombo, Scientific technical manager, Gaetano Pini Institute

“We had numerous databases, but they lacked the level of reliability and security we needed,” said Schieroni. “A data system required by the CRSS-SISS and EUOL has to guarantee uninterrupted service 24/7, not only from the server, but from the entire technology infrastructure supporting the server, the LAN and data transmission.” To handle that, all strategic networking lines were duplicated as were the operating unit connections, the A&E connections and the connections to hospital departments essential to the survival of hospital operations. The result was a system with fully integrated communication between the emergency room, the operating complex and various strategic departments within the facility.

Another challenge was developing a system that could support the hospital’s disaster recovery initiative.

“To accommodate our plans for a disaster recovery system, we had to implement a duplicate environment, entirely cabled in fiber optics and equipped with a disaster recovery management system,” said Laura Colombo, scientific technical manager of Gaetano Pini’s Data Processing and Information Policies department. “Now, a separate Gaetano Pini building houses an exact replica of the ERP solution for managing disaster recovery and is on permanent standby to provide emergency backup.”

When the project was completed, the hospital had met its goals. It was able to provide healthcare information to the public using an extranet based on a scalable system that will grow according to demand with the addition of processors, memory disks and graphics cards to meet its changing needs. Additionally, upgrades can be carried out without interruption in service, a key benefit in a hospital environment.

The Human Element

One success factor cited by the hospital was the SGI team’s application and domain expertise, as well as reliability. In



About Istituto Ortopedico Gaetano Pini

Headquartered in Milan, Italy, the Gaetano Pini Institute is a nationally renowned hospital specializing in orthopedic treatment. The hospital serves as a teaching and training facility for medical students at the University of Milan and as a research center for orthopedic specialists worldwide.

Gaetano Pini Institute employs 796 personnel, 150 of whom are doctors and 352 of whom are on the nursing staff. www.gpini.it

In addition to its deep technology experience, SGI offers a world-class Professional Services team that specializes in building and deploying top performance cluster, capability and hybrid systems.

Together with the technology leaders at Gaetano Pini Institute, the dedicated SGI team members were able to deliver a solution designed for maximum configuration flexibility, performance and reliability.

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The Control Center

The new system implemented for the management of the Istituto Ortopedico Gaetano Pini of Milan was developed with technology from SGI, Oracle and Red Hat. It includes

a two-cluster information system based on the SGI® Altix® 350 server with 2 Intel® Itanium® 2 processors supported by an SGI® InfiniteStorage TP9300 archive system with a 24 x 300GB disc capacity.

The Ethernet portals are standard gigabit, while the connection to the storage system is through two HBA two-gigabit Fiber Channel networks.

Now Gaetano Pini has an extranet that provides information about such value-added services as health and social assistance programs, connecting more than 9,000 citizens to medical professionals, pharmacies, public and private hospitals and shelters for the aged. The system also meets the requirements for the region's Online Emergency Urgency (EUOL) programs for disaster preparedness and recovery, so that the community will have access to medical resources and shelter in the event of infrastructure, weather or other types of emergencies.

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