

Montefiore Medical Center has been meeting the healthcare needs of New Yorkers and patients from around the world for more than 100 years. Based in the Bronx, the medical center is one of only a handful of medical centers worldwide that has achieved 100% computerized physician order entry (CPOE). The hospital's state-of-the-art Clinical Information System (CIS) enables physicians to electronically enter all inpatient orders—including medications, lab tests, diagnostic tests and all other clinical care orders. By automating the order process, physicians reduce the risk that handwritten orders may be misinterpreted. In addition, the system can bring additional clinical information—such as warnings about possible drug interactions and overall best courses of treatment—directly to the physician as the order is entered.



The Challenge: Getting More Value from Existing Data

The Montefiore CIS is powered by eight HP NonStop S74000 units running an Enscribe database. As a major research facility, Montefiore relies heavily on the transactional data within this system for statistical analysis, patient studies, fiscal reporting, and other data-intensive pursuits. To perform this research and analysis, the medical center uses a number of OLAP reporting applications including products from SAS, Cognos and Crystal, all of which pull data from a secondary Sybase database used as a data warehouse. For the Montefiore IT team, getting data from the Tandem/Enscribe database to the Sybase system was a time-consuming process that limited the scope of its reporting. The Transactional Data Management platform from GoldenGate eliminated this time delay factor and enabled Montefiore to optimize the value of its data.

The Solution: Enterprise Data Integration from GoldenGate

The GoldenGate platform provides sub-second capture, transformation and delivery of large volumes of data throughout the enterprise. Using unobtrusive log-based change data capture technology, the GoldenGate platform incrementally synchronizes databases changes as they occur, an approach that eliminates the need to reload entire databases and minimizes impact on the host system. Moreover, GoldenGate's bi-directional capability and load balancing features enable all systems to accept live transactions.

"Before we had GoldenGate, moving data from the Tandem system and loading it to a data warehouse on the Sybase system would take us around a week," explained Jose Menendez, Senior Systems Architect responsible for Montefiore's data warehouse. With GoldenGate, however, Montefiore can now capture and apply new records from the Tandem units in a few hours, and do so without significant impact on the system because the program uses only about seven percent of one CPU.

The Results: Real-Time Data Integration

Users throughout the medical center can now perform ad-hoc reporting based on real-time data whenever necessary because GoldenGate allows for the sub-second capture, transformation and delivery of the data in the CIS's Tandem/Enscribe system to the Sybase system. Also, the GoldenGate solution seamlessly repurposes the Tandem data so that the reporting applications can immediately begin processing. Said Menendez: "With GoldenGate's data integration capabilities, a report that would have taken 24 hours to run on the Enscribe system with the old process takes just two to three minutes today. And, the quality of the information we can provide to the center's Outcomes Analysis and Decision Support groups is much higher because GoldenGate supplies us with up-to-the-minute data."

“**With GoldenGate's data integration capabilities, a report that would have taken 24 hours to run on the Enscribe system with the old process takes just two to three minutes today.**”

Jose Menendez,
Senior Systems Architect
Montefiore Medical Center

The GoldenGate platform also enabled Montefiore to eliminate service interruptions on the CIS and achieve business continuity. "Patient data must be available 24x7x365—the doctors depend on the CIS as they make life and death decisions, so downtime is not an option," said Carl Baylis, Assistant Director at EHIT, Montefiore's outsourced technical services provider. For several years after the CIS was

implemented, however, the medical center averaged three to six hours of downtime every two months. The system would be taken offline for maintenance, data manipulation and other operations. Seeking to eliminate these interruptions, Baylis and his team found the perfect solution in GoldenGate. "With GoldenGate we have eliminated downtime and achieved true continuous availability," said Baylis. "It also enables us to optimize load balancing and makes it very easy to manipulate data as volumes and transactions increase."

Overall, Baylis, Menendez and the rest of the MIS team at Montefiore are very pleased with the GoldenGate platform. "One of the solution's best attributes is that it won't allow you to make an error," said Baylis. Baylis and his team have also found that GoldenGate supports a wide range of tasks beyond continuous availability, load balancing and data integration. The team

recently used the GoldenGate platform to manage an upgrade to a new Tandem system, and also plans to use it to administer a new hot-site backup system that it will be implementing soon. "No other solution out there could meet all our requirements like GoldenGate does," said Baylis.

About GoldenGate

GoldenGate is a leader in Transactional Data Management. The GoldenGate platform enables companies to capture, route, enhance and apply data in real time inside and outside the enterprise to support key business initiatives such as business availability, data integration, business visibility, and compliance. GoldenGate, a private company, has thousands of installations in 35 countries. Customers include Bank of America, Sabre Holdings, Bank One, Dell, VISA, Merrill Lynch and the Federal Aviation Administration. For more information, please visit the company's web site at www.goldengate.com or call 1-877-447-7153.

GOLDENGATE™