

# U.S. Stimulus Package Urges Healthcare Organizations to Improve IT Systems

## “Going Paperless” Must Have Proven IT Solutions

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The economic stimulus package signed into law by President Obama on February 19 has profound implications for healthcare providers. In particular, the portion called the Health Information Technology for Economic and Clinical Health (HITECH) Act earmarks \$19 billion for the development of health information technology, with specific incentives for healthcare organizations developing electronic health record (EHR) technology by 2011—and penalties for those who have not developed EHR technology after 2015.

Recent estimates report that only 10% of hospitals in the U.S. are currently using electronic medical record (EMR) systems, a key component of the broader EHR technology that can also include non-medical records, which means this area is expected to see a strong surge of activity over the next few years.

### THE 24X7X365 DATA ACCESS CHALLENGE

Supporting a modernized “paperless” medical records environment will require mission-critical infrastructure solutions for uninterrupted availability, optimal performance, and fast (even real-time) integration of data between multiple systems and locations.

Take, for example, Memorial Hermann in Houston, Texas, a large not-for-profit healthcare system, comprised of 11 hospitals, seven comprehensive Cancer Centers, 27 sports medicine and rehabilitation centers, and dozens of additional specialty institutes and outpatient centers. Having recently merged the Memorial Healthcare System and Hermann Healthcare System, Memorial Hermann needed to migrate very large volumes of critical patient data with minimal downtime to a newer system, yet

minimize interruptions to clinical application users. Any degree of system downtime would cause doctors and nurses to resort to paper records when treating a patient, which is less than ideal.

***Supported by the right technologies, healthcare organizations can achieve a reliable infrastructure for EHR.***

To reduce downtime and service impact during the migration, Memorial Hermann used GoldenGate Software’s data replication technology to synchronize all the data in real-time between the old and new systems. As new medical data transactions were made to one database, the changed data was immediately sent to the new system to ensure the most current data was always integrated. It allowed them to cut-over to the new environment with minimal risk. “It is experiences like this that show us how vital our partner technologies have been in helping us live up to the exceptional standards our healthcare network has come to operate by,” said their systems executive for technical services.

Beyond migrations, the modernized healthcare organization will need a plan to eliminate (or at the very least significantly reduce) any form of downtime, whether due to unforeseen outages or routine maintenance—so as not to impact the delivery of care.

### REAL-TIME DATA IS HEALTHIER DATA

Healthcare organizations will also need to overcome data integration issues, so that data can be available for reporting and analysis with minimal latency. For example, the extract, transform, and load (ETL) products that are

often employed in data warehouse environments process data in batches, introducing latency into the process while putting performance strains on the source systems. Real-time, low-impact data integration technologies will provide better capabilities meeting new healthcare IT requirements.

More current data for reporting was needed at Adventist Health System of Winter Park, Florida, where its 43,000 employees manage 37 hospitals that provide care for nearly 4 million patients annually in inpatient, outpatient, and emergency room visits. Adventist wanted to implement a better reporting solution for its clinical information system, to improve overall quality of care to patients.

Adventist deployed GoldenGate’s real-time data integration technology to continuously move the most recently changed data from several distributed Cerner Millennium® clinical information systems into an enterprise data warehouse. From there, Cerner products provide reporting and analytics on the real-time data delivered by GoldenGate to track patients as they move through the hospital network, including specific reports on length of stay, diagnosis, discharge summary reports, pharmacy orders and financial reports.

### PROVEN SOLUTIONS FOR HEALTHCARE IT MODERNIZATION

Supported by the right technologies, healthcare organizations can achieve a reliable infrastructure for EHR. GoldenGate has a long history partnering with application providers for healthcare, including GE Healthcare and Cerner, to deliver high availability and real-time data integration and reporting solutions to hospitals across the U.S. ■