



Transforming Healthcare with Integrated Data Platform

Hartford Hospital Optimizes Patient Care, Streamlines Regulatory Reporting with Informatica Platform

FAST FACTS

BUSINESS INITIATIVES

- Enable departments across the enterprise to understand their payroll expenses more quickly and take action
- Deliver consistent high-quality care that improves a patient's experience
- Support regulatory agency reporting requirements to help avoid audits
- Resolve business needs faster (and lower IT costs at the same time)

TECHNOLOGY STRATEGY

Implemented the Informatica Platform to meet Hartford Hospital's data integration needs, including a payroll data mart and operational data store and a pilot project to create a patient throughput dashboard.

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— Ron M’Sadoques, Technical Services Manager, Revenue Cycle Team, Hartford Hospital

Reaching the Highest Standards of Care

Hartford Hospital is an acute care hospital in Hartford, Connecticut. The State of Connecticut established the hospital in 1854, after a boiler explosion and fire at a local factory caused many deaths and serious injuries. Today, Hartford Hospital is one of the largest patient care centers in New England, with a world-class medical staff and more than 7,000 employees.

Like any major medical facility, Hartford Hospital strives to achieve maximum efficiency, meet the highest standards of care, and provide the most positive patient experience possible. To achieve these goals, Hartford Hospital turned to information systems long before the government mandated the use of electronic medical records. But the hospital faced a problem common to large healthcare providers: data spread among many different systems—including accounts payable, human resources, purchasing, payroll, and inventory—in a wide variety of formats. Pulling the data together for analysis and reporting can be a complex and costly undertaking, usually involving time-intensive hand coding.

“We have the same challenges that everybody else has,” says Ron M’Sadoques, technical services manager of Hartford Hospital's revenue cycle team. “Each different area purchased a system to take care of its unique business processes. These individual systems contain data that is needed for decision making, for regulatory compliance, and for input to other applications.” Thanks to the Informatica® Platform, M’Sadoques says, Hartford Hospital has made this data both accessible and usable, enabling a higher level of collaboration across the enterprise to enhance patient satisfaction and the overall operational efficiency of the hospital.

BENEFITS

- Savings of approximately two full-time equivalents through reuse of data integration assets
- Managers budget and staff accurately, avoiding additional unplanned costs
- Publishing timely and accurate reports to regulatory agencies, helping the hospital avoid audits

NUTS AND BOLTS

- Solution: Data integration
- Product: Informatica PowerCenter®
- Sources: Legacy mainframe application (Siemens Invision); Oracle, Sybase, and Microsoft SQL Server files; SmartStream ERP system; Eclipsys clinical systems; diverse systems including accounts payable, human resources, purchasing, payroll, and inventory, with data in multiple formats
- Targets: Payroll data mart and operational data store; patient throughput dashboard

Streamlined Payroll Reporting

Hartford Hospital first implemented the Informatica Platform almost a decade ago to feed a payroll data mart and operational data store. “The payroll system that we’re running is fairly complicated and has been in place for a long time,” says M’Sadoques. “There is a row of data for every line on every person’s weekly pay stub, and these elements—millions of discrete data bits, such as hours worked, earnings, deductions, taxes, vacation time, and employer contributions—all look different in the source tables. So the first issue we tackled was: ‘How do we enable our payroll department and department business managers to make staffing and scheduling decisions based on this information?’ ”

The answer was to have the Informatica Platform extract data from each table and transform it into a common format. “This has allowed us to write applications that go right to the managers’ desktops,” says M’Sadoques. “We have over 600 people in supervisory positions, and every manager now has immediate access to what happened in last week’s payroll.” This access is particularly valuable in running a clinical department, where it is common for nurses to “float” from one cost center to another, depending on patient load and volumes. The system also provides valuable insight into incidental overtime, as well as staff shortages and overages.

Cost Analyses at Your Fingertips

In another valuable application, the hospital uses the Informatica Platform to take disparate data from its SmartStream general ledger system and organize it so that it can be used for budgeting and planning for various types of staff resources. According to M’Sadoques: “It’s not enough to know the expenditure for the surgical floor. We need to know the cost for patient care associates, registered nurses, nurse managers, therapists, and many other staff roles. Thanks to the Informatica Platform, we can easily break the payroll information down by position.”

The Informatica Platform also enables M’Sadoques’s group to put monthly budget and expense information at the fingertips of thousands of hospital employees—from vice presidents and directors to managers, administrative assistants, and department secretaries—with an easy-to-use account review tool across the entire enterprise. Before purchasing supplies, for example, administrators can check the tool for an up-to-the-day view of expenses against budget, helping departments rein in costs. “It’s being used every day for everyday decisions,” M’Sadoques says.

Adding to the value of the Informatica Platform for Hartford Hospital is that capacity has never been a problem. As the hospital’s use of the solution has grown, the costs to run it haven’t. M’Sadoques says, “We’ve been able to scale the platform to meet new business needs as they arise.”

Avoiding Regulatory Audits / Enabling Smart Regulatory Compliance

One of the toughest challenges for healthcare providers is meeting government and industry regulations that grow tighter and more complex each year. Agency audits are common and often costly events that require providers to compile detailed data on any aspect of their clinical and business operations. “Hospitals are highly regulated,” M’Sadoques says. “There are a lot of agencies—federal, state, and local—that need this information.”

With its Informatica-driven payroll data mart, Hartford Hospital gained a powerful capability for responding to compliance, audit, and eligibility requests from agencies such as Medicare, the State Department of Labor, and The Joint Commission for Accreditation of Healthcare Organizations, the nonprofit organization that accredits and certifies healthcare organizations and programs in the United States. This system allows the payroll department to quickly and easily find the answer without navigating complex tables.

“Instead of having to go back into the source system to bring up payroll history, they have a ready-made query with date parameters that gives them all the information they need to submit to regulatory agencies,” M’Sadoques says. And because many of the reports are automated, the hospital often avoids deeper regulatory agency audits.

Economical Data Integration

M’Sadoques estimates that his group alone has saved approximately two full-time equivalents by basing the bulk of its data integration on Informatica technology. “We absolutely are avoiding a lot of work by having this data mart,” he says. “With its reuse of data objects and similar efficiencies, the Informatica Platform is the best solution for the job. We code the business tools once, and we’re done.”

By adopting an industry standard data-integration solution, Hartford Hospital avoids the extra costs associated with manual methods of mapping, transforming, and moving data. “We have a patient accounting system, a financial package, purchasing and HR systems—and the information in these systems needs to go elsewhere, either for decision support, or regulatory reporting, or for vendor and business collaboration,” M’Sadoques says. “Informatica is our central platform that we use to move data from one system to the next in a consistent, automated, and cost-effective fashion.”

Patient Throughput Dashboard

As part of a promising pilot project, data is also drawn from Eclipsys clinical systems (part of the hospital’s electronic health record) to help optimize patient throughput. M’Sadoques explains, “One of the big issues in hospitals is around making the best possible use of resources. In a typical scenario, patients arrive for surgery in the morning; when they get out of surgery and post-anesthesia care, they go up to the floors. We need to ensure that there are enough beds available at each stage, that the nurses are ready to accept the patients, and that every patient is discharged in a timely fashion.”

Hartford Hospital uses the Informatica Platform to extract data from multiple systems—including Oracle, Microsoft SQL Server, and Sybase flat files—to populate a dashboard that measures patient throughput. “Informatica is ubiquitous and agnostic; it doesn’t care where the data comes from, or where it goes,” says M’Sadoques. “This universal data access lets us draw data from all of these diverse systems with very little processing, and drop it right into the database. The Informatica Platform is the central hub of this system.” The dashboard was designed and built by IntellisEPM, which was recently purchased by CAREfx.

According to M'Sadoques, the success of this important capacity planning effort hinges on his team's ability to be virtually invisible when it comes to collecting data. "We promised the owners of the various systems that we would be in and out, and they would not even know we were there," he says. "If we need to do any processing, we just leverage Informatica to quickly pull the data down to the staging server, so we're using as few cycles as possible in the floor system. There's no performance hit at all." Once the data has been staged, a second Informatica process transforms it into the format that CAREfx requires; the third step is to turn the data into a comma-delimited file for other systems to consume.

In addition to helping enhance quality of care and patient satisfaction—the hospital's central focus—the dashboard is expected to drive cost out of the business by establishing and tracking patient discharge and bed management metrics. "If we did not have Informatica, I'm not sure we would even have embarked on this project," concludes M'Sadoques. "It would have required far too much manual work. The Informatica Platform is definitely paying for itself in terms of time savings for my staff. Any time there is a data transformation issue, something that we have to solve, we go to Informatica first."

Learn More

Learn more about the Informatica Platform. Visit us at www.informatica.com or call +1 650-385-5000 (1-800-653-3871 in the U.S.).

About Informatica

Informatica Corporation (NASDAQ: INFA) is the world's number one independent provider of data integration software. Organizations around the world gain a competitive advantage in today's global information economy with timely, relevant and trustworthy data for their top business imperatives. More than 4,000 enterprises worldwide rely on Informatica to access, integrate and trust their information assets held in the traditional enterprise, off premise and in the Cloud.



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