

# InformationWeek

Business Innovation Powered By Technology

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## Software Tools

### Smarter Patient Care

**PREMIER INVESTS IN DATA WAREHOUSE TO IMPROVE HOSPITAL SERVICES AND CUT COSTS**

**HEALTH-CARE ORGANIZATIONS** are in a pinch, caught between demands to improve the quality of their services and control rising costs. A better understanding of how services are delivered is one way to work toward meeting both goals.

Premier Inc., an alliance of more than 200 hospitals and health-care organizations across the United States, sees additional investments in data-warehouse technologies as a means to gain that understanding. Premier is moving a 1.5-terabyte data warehouse of clinical and hospital information into a Netezza Corp. data-warehouse system, which Premier says will perform complex analysis tasks more quickly and at lower costs. That, in turn, will help clinicians identify the most-effective medical procedures and let business managers develop cost-saving purchasing strategies.

Some 4,000 employees at Premier and its affiliated hospitals access the data warehouse to analyze operational, patient, clinical, and purchasing data.

#### PREMIER'S NEW SYSTEM

- >> Netezza NPS 8150 data warehouse
- >> Oracle database to stage data coming from hospital operational systems
- >> Tools from Ab Initio Software for extracting, transforming, and loading data for processing
- >> Software from Hyperion, MicroStrategy, and SAS Institute that employees will use to access and analyze information
- >> Continued use of IBM's Red Brick database for multidimensional data-analysis applications

Data: Premier

The system is used to study patient demographics, for example, and the outcomes of alternative procedures such as angioplasty versus open-heart surgery. "Quality initiatives are a big focus for us today," says Gary Feierstein, VP of IT.

Premier's pharmaceutical research services division will likely be the first to use Netezza once it's operational in March, architecture director Chris Stewart says. The system will be able to conduct analysis to determine how often certain medications are admin-

istered to patients in conjunction with other drugs to judge their combined effectiveness.

Premier's data warehouse holds more than three years of data culled from patient-record and billing applications and other operational systems and has been running on IBM's Red Brick multidimensional database. But as the volume of Premier's data grew, the capabilities of the Red Brick system became limited. "We need better throughput, and we need to keep up with the growing volume of the data," Stewart says. Premier also found that complex queries run much faster on the Netezza system, and at lower cost, than on the Red Brick database.

Data warehouses are complex systems that generally take months to assemble using software and hardware from multiple vendors. Netezza Performance Server is a prebuilt data warehouse, including server, storage, and database technology in a single unit.

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