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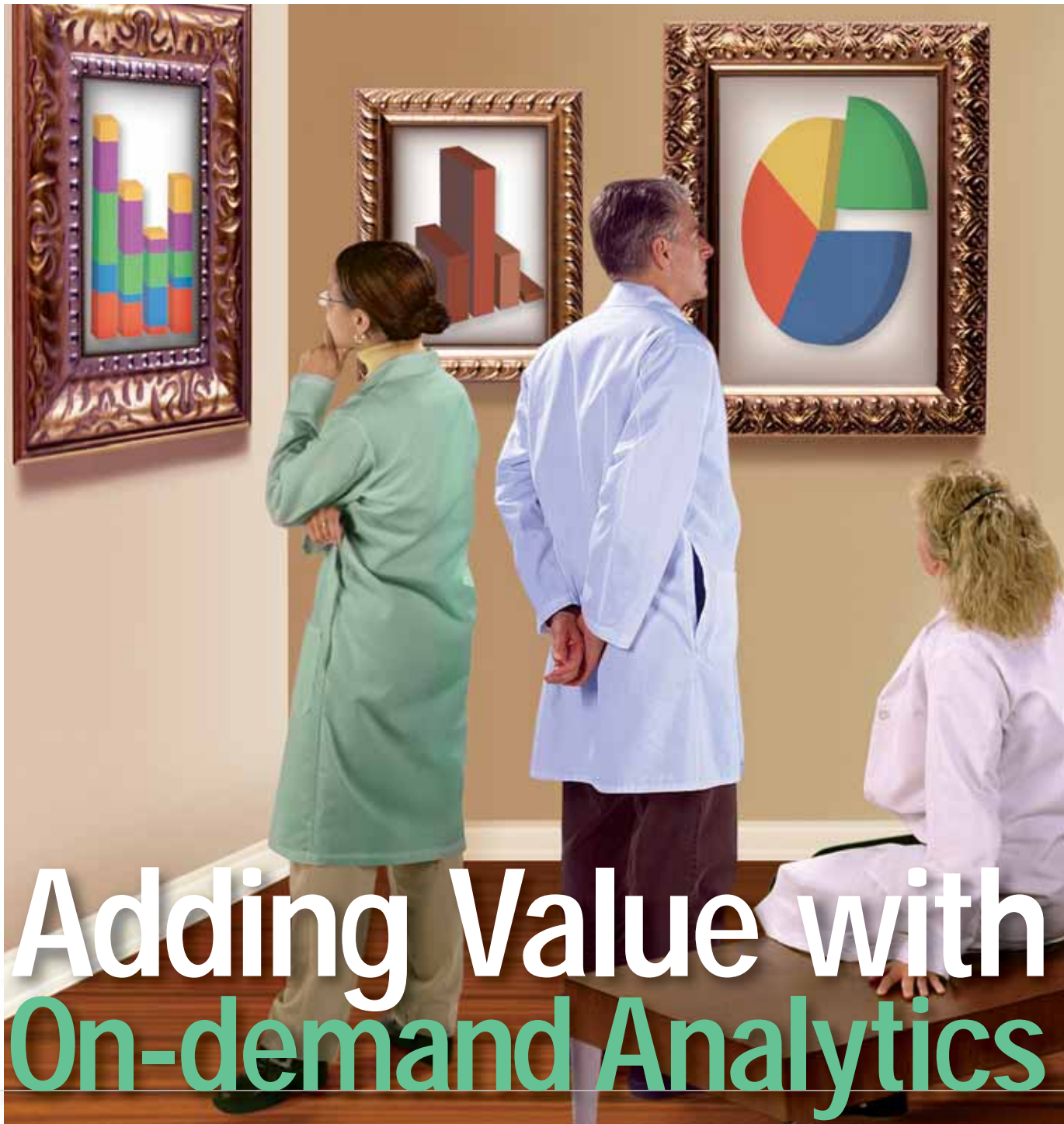
Realistic Strategies for IT Leaders

# Patient Safety Technology

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## ON-DEMAND ANALYTICS

Information from daily  
business processes.



# Adding Value with On-demand Analytics

By Jim Quist

With a framework to measure, understand and act on the information generated by daily business processes, health care executives can gain a strategic advantage.

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The health care industry continues to be under unprecedented pressure. Health care's traditional management strategies provide few navigational tools in an environment of increasingly strict regulatory requirements, rising costs, new treatment options, government deficits and baby-boom demographics. Organizations must respond quickly as employers, payers and consumers demand increased transparency, cost management, access and choice. Many health systems have implemented new ways of enacting, reporting and monitoring business activities in response to the Leapfrog initiative, as well as HIPAA, Sarbanes-Oxley and other government regulations and mandates.

Amid all the chaos, one thing is clear: Financial performance drives the long-term viability of any health care enterprise. Sustainable operating margins of at least three percent are necessary to keep the doors open, unless alternative sources of capital are available. In turn, maintaining adequate operating margins depends on proactive financial management. And, proactive financial management is only possible if financial executives have the ability to access current and comprehensive information about performance across the entire system to include activity in admissions, medical records, payer relations, denials management, reserve management and capital spending.

Overall, health care financial managers require new levels of business intelligence and analytical capabilities to help drive better decision-making and achieve greater profitability. As hospitals and health systems recognize the need for comprehensive planning and proactive financial management, many are rapidly adopting a strategy called *performance management*, the process of measuring key business performance indicators against clearly defined strategic goals and objectives. Organizations that practice performance management define their corporate goals, align those goals with measurable indicators and regularly review their performance.

To effectively practice performance management, health care financial executives need to be able to quickly access current information and report on that information in a way that enables decision-makers to see the big picture. Performance management is made possible by next-generation technology solutions that deliver extended financial management capabilities. These tools, such as on-demand analytics, allow instant access to the most current information about the organization's key performance indicators and overall operations. On-demand analytics provide the framework to measure, understand and act on the information generated by daily business processes, providing a strategic advantage to health care executives seeking to respond to today's financial challenges.

### Information environment

Traditionally, health care organizations have tracked revenue cycle function and managed financial data using on-premise client/server applications, in which software applications and hardware are installed at the physical locations of hospitals and health organizations. While on-premise systems allow organizations to maintain complete control of data, they are costly to maintain, difficult to upgrade and may take months or even years to be fully implemented. Each new software application requires significant investment in computer hardware, databases, networking gear and programming tools, as well as teams of programmers and consultants.

However, the IT infrastructure implemented during the last 20 years was not designed to facilitate performance management. Most client/server systems use a variety of applications, each of which classify and code data differently. The diversity of these data "silos," most of which were built for transaction processing, can make even the most sophisticated health systems a challenge to navigate and assess in terms of performance metrics.

When financial data is pulled from several sources, it is usually inconsistent, redundant and not meaningfully integrated. Data might be gathered about individual components, but it is difficult and sometimes even impossible to aggregate the various individual components into usable information.

Increasingly, health care IT departments are being held accountable for delivering timely responses to management's needs for key performance indicators and other information. Yet, without an information management architecture that can deliver integrated and consistent data, even the most skilled IT team may not be able to provide timely responses to management's requests for information. It may take weeks or months of building query after query for the IT team to traverse multiple general ledgers, patient financial systems, contract systems and client/server business intelligence tools. By the time financial executives receive the information, the decision-making window may have closed.

In this environment, financial managers often find themselves overwhelmed with data — yet lacking coherent information that they can use to make decisions. Without access to integrated information that is refreshed on a continuous basis, it is difficult to look at long-term trends such as denials and overall revenue cycle bottlenecks. Lacking the big-picture view of the organization's financial condition, managers often find themselves reacting to past mistakes, rather than making proactive decisions.

### Improving access to information

Faced with disparate information systems, non-standardization of data and an ever-increasing need for information about key performance indicators, health care organizations are turning to flexible, on-demand delivery models. The next evolution in application and services deployment, on-demand delivery models provide an alternative to traditional on-premise client/server or Web-based applications. Also called "software-as-a-service," on-demand technology is an applications infrastructure based on a scalable, multi-tiered Internet architecture.

On-demand software applications are designed to be hosted and delivered over the Internet, reflecting a fundamental change in the way software is developed and deployed. The vendor writes and manages only one version of software code for a single platform and configuration, and simultaneously deploys



it to all of its customers via the Internet. Software-based services and solutions are distributed and managed from a central data center. The customer accesses the software application through the Internet or a virtual private network, while the vendor hosts the software application and the organization's data in a separate and virtual location.

Technology requirements are simple: Customers need a Web browser and high-speed access to the Internet. To gain access to specific application or software needs, the customer simply connects to the Internet. The on-demand infrastructure is scalable throughout the organization and across a variety of systems. A customized on-demand system can be up and running quickly, often in less than 30 days. Many vendors can tweak the look and feel of the interface for each organization, bringing the information to the desktop in whatever view is desired. User training time is often less than two days because on-demand systems use a Web-friendly and intuitive interface.

#### Extended financial management

Leading health care organizations are finding that on-demand analytics allow them to leverage financial data to take a systematic approach to performance analysis. On-demand analytics provide the architecture for measuring key performance indicators including accounts receivable performance, claims submission and status, managed care contract performance and revenue cycle analytics. Extended financial management delivers a consistent, integrated toolset that enables reporting and analysis across applications. Measures are not looked at one at a time, but in comparison with other key performance indicators. Health care executives can use those measurements to make sense of disparate streams of data and guide their business decisions.

Analytics software allows information to be rapidly deployed across the organization, with new levels of integrated financial analytics and drill-down analyses. Because the application is Web-based, any member of the team who has appropriate clearance can access information at any time from anywhere. In other words, a secure, centralized source of data is available 24 hours a day to all authorized users in all locations.

A central repository of analytics delivers a trusted source of consistent and



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reliable information to the management team. An integrated desktop environment allows team members to review budgets and income statements and use dashboards and scorecards to track key performance indicators and flag inconsistencies and potential problems. Data is gathered from multiple transaction systems and translated into consistent information about financial and operational performance. Because all employees share the same metrics, they can identify key performance indicators and achieve a collective knowledge of the measures that affect overall business performance.

Analytics applications work best when they allow individual users to drill down to different levels of data to get the detail they need to make decisions and increase productivity. Ad hoc query analyses combined with drill-down capabilities can function like a search engine, allowing users to view data by any defined category such as patient type, payer or financial class. Users can also develop a personalized suite of reports and analytics that are automatically updated as new data is added. Specific aspects of performance can be compared against internal and external benchmarks.

If users need a different view of the information or a different performance metric, changes can usually be implemented and deployed rapidly.

On-demand analytics can dramatically shorten the time needed to make the best decisions — from weeks or months to hours or days. Consistent, current and detailed reports provide navigational tools that managers can use to quickly make informed decisions to keep the organization on course. Armed with clear, comprehensive information, health care executives can understand and monitor activity and make proactive decisions based on key performance indicators rather than retroactive decisions based on past mistakes.

Because analytics software aggregates information from unrelated data sources, organizations are not buying yet another application, but are able to leverage and derive greater value from existing data and information systems investment. Even if a hospital or health system has a number of different legacy systems, an on-demand platform can integrate data from those systems into usable information. On-demand analytics actually extend the life of legacy systems by allowing greater access to legacy data.

In sum, on-demand analytics combine low project and application risk with a rapid impact on financial performance. Health care organizations that successfully deploy performance management strategies and technologies see measurable gains in operational improvement and business growth. ■

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