Powering Tomorrow’s Information-Driven Healthcare Today
Introduction

From individual hospital departments to nationwide institutions, healthcare organizations are looking to the latest in information technology (IT) to help them meet the challenges of providing better patient care at a lower cost. Fortunately, two technology leaders, Oracle and Cerner, have come together to provide a comprehensive information system for twenty-first century healthcare.

The healthcare environment continues to experience rapid transformation, and healthcare providers worldwide—both public and private—are facing issues that threaten their survival. Declining reimbursement values, increasing competition, patient choice, stricter regulations, and inefficient use of scarce resources jeopardize their viability. To survive—and prosper—in this turbulent environment, healthcare providers must fundamentally re-examine ways for their IT infrastructures to deliver the actionable information that drives effective decision-making, operational effectiveness, improved patient safety, and better clinical outcomes.

Leveraging their long-standing, strategic relationship, Oracle and Cerner have worked closely to develop a comprehensive, information-driven healthcare IT solution that combines the leading integrated clinical application with the leading worldwide supplier of enterprise-class business systems for healthcare providers. Their solution goes beyond the patient-centric world of today’s healthcare organizations to provide a broad, innovative approach that empowers patients to lead healthier, more-independent lives by managing their own healthcare.
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Data Integration: Healthcare’s Greatest Challenge

To meet the challenges of providing better patient care at a lower cost, organizations in the healthcare industry know they must be able to integrate clinical data with their financial and administrative data. Data integration has always been a challenge for the healthcare industry because information is fragmented across multiple systems, and for most healthcare providers, the task of integrating data from the many disparate systems is simply too difficult, too time-consuming, and too expensive.

However, organizations can no longer afford to ignore the task of integration—the benefits (and the competition) are too great. In addition, by integrating their data, healthcare organizations will be able to

- Improve the operational efficiency of their organization
- Better enforce compliance with federal, state, and local regulations
- Improve patient safety and clinical outcomes

Changing Environments Transform Expectations

As the healthcare environment continues to experience rapid transformation, healthcare providers worldwide—both public and private—are facing issues that threaten their survival. Declining reimbursement values, increasing competition and patient choice, stricter regulations, and inefficient use of resources jeopardize the viability of organizations unwilling or unable to adjust.

In the past, healthcare organizations have typically taken a contradictory approach to technology investment by combining advanced medical equipment with rudimentary administrative and financial systems. However, with the rapid changes characterizing today’s healthcare environment, this status quo cannot continue.

Determining Corporate Profitability

More and more, the corporate income of healthcare organizations is being determined by patient treatment activities and, ultimately, by patient treatment outcomes. This means that healthcare providers must understand their overall profitability so they can recognize which treatments will
likely make money and which treatments will break even or lose money. This recognition should be at an operational level (for example, is a patient going to exceed the tariff based on their current treatment?), but also at a planning and forecasting level so management can understand both the profitability of departments and the profitability of the entire organization across a case of mixed scenarios.

This level of information requires the integration of financial and clinical information to provide transparency on costing and profitability. In addition, healthcare providers need enterprise-class financial systems to help them improve their cash flow.

**Monitoring Supply Chain Activities**

Approximately 25 percent of healthcare spend is in the supply chain. Purchasing requirements are diffused across departments with many specialized areas, such as the operating room and the pharmacy.

Managing these purchasing requirements across the entire healthcare organization is challenging, but the rewards for successfully rationalizing the product catalog, eliminating maverick spending, enforcing purchases on contracts, and reducing stock levels without diminishing service levels can be significant. Such management can only be achieved by supporting the end-to-end processes of sourcing, contracting, and requisitioning across the finance, administrative, and clinical processes—in other words, by integrating the data from a variety of sources and bringing it together to review and analyze.

**Retaining Experienced Staff Members**

While the importance of attracting, retaining, developing, and managing staff members in healthcare organizations is self evident, it too often fails to be translated into effective action. By integrating data from human capital management (HCM) systems with clinical data, organizations can more effectively manage human resources and can be more efficient about maintaining the necessary certification, compliance, and audit processes.

**The Emerging Challenge of Patient Choice**

Both public and private healthcare organizations are facing a relatively new challenge of patient choice. In most health systems, patients now have options about where they can have their treatment, so healthcare organizations are using patient choice as a reason to improve clinics and enhance the overall patient experience.

Patient choice combined with the use of treatment activity and patient outcome as a way to determine an organization’s reimbursement creates a very strong incentive for healthcare providers to attract more patients. The more patients they treat (for treatments that they can do profitably), the greater the income and profit margin.
Providing a Satisfactory Patient Experience

Healthcare providers are typically large, complex organizations that can be difficult for patients to navigate, making it difficult to provide the patient with a satisfying, positive experience. For example, making patient appointments often involves more than one department. Multiple touchpoints increase the possibility of missed or duplicate appointment-reminder messages and incomplete communication. Patients become stressed and confused, which can lead to everything from missed appointments to being sent to the wrong clinic.

From an administrative point of view, poor communication can result in available appointments not being used and an inaccurate counting of patient episodes, all of which can adversely affect revenue. Ultimately, in an environment where patient choice has become a deciding factor, a bad experience means that a patient will go elsewhere next time.

As healthcare providers start to consider how they can attract more patients and improve the overall patient experience, forward-thinking providers are already using customer relationship management (CRM) software to improve the way they manage relationships with patients. For example, with CRM software, healthcare organizations can

- Implement one, multichannel contact center to control and coordinate the interactions between patients and healthcare providers
- Use standardized scripts to provide a high level of consistent information for patient queries
- Link the contact center directly to the appointment system so a patient can—with one call—make, change, cancel, or inquire about appointments; check locations; and be notified of any special instructions
- Improve communication with patients (and make better use of provider resources) by using demand management software to remind patients of appointments, manage waiting lists more efficiently, and fill late cancellations

Providing Patient-Centric Healthcare

Once a system that is more patient-centric is in place, healthcare providers can also use it to help individual patients manage their conditions more effectively and lead a healthier, more independent life. For example, healthcare providers could

- Provide discharged patients with the name of a medical professional who fully understands their case and can provide advice or answer questions (especially over weekends or holidays)
- Warn vulnerable patients of impending environmental risks, such as heat waves or bad air quality
- Suggest specific wellness programs, such as smoking cessation
- Provide online or contact center–based medical advice on any condition, from flu to sexually transmitted diseases (STDs)
• Monitor the condition of patients remotely while also coaching them to monitor and manage their conditions on their own

Solutions with a Common Purpose

Both Cerner and Oracle have invested significant time, resources, and research into providing information-driven software solutions for the healthcare industry. They have worked closely to develop the most complete, integrated healthcare offering available.

Cerner: Focused on Solutions for Healthcare IT

For more than 26 years, Cerner Corporation has focused on developing healthcare information technology (HIT) solutions that “take the paper out of healthcare.” With more than 870 clinicians, 1,360 engineers, and 2,100 consultants, Cerner has deployed more than 4,300 Cerner Millennium applications to clients around the globe. Cerner has spent more than US$1 billion on research and development in the past 10 years and plans to spend an additional US$1 billion in the next 5 years. Cerner Millennium won top honors in the hospital category at the Towards the Electronic Patient Record Conference (TEPR) in 2004 and 2005.

Cerner Millennium is Cerner’s person-centric architecture designed to transform healthcare delivery. Cerner healthcare solutions combine technology with knowledge to deliver vital data for effective, real-time decision-making across the enterprise—with the goal of eliminating errors, variance, waste, and delay and providing more-efficient business management and better patient care.

Industry-Leading Architecture

Open and scalable, Cerner Millennium’s industry-leading architecture enables core clinical and financial automation while laying an integrated foundation for future growth. The design, implementation, and management of Cerner’s IT solutions can help healthcare organizations achieve the clinical and operational improvements they need to survive in the rapidly changing healthcare industry.

International Experience

Cerner has been active in the global marketplace since 1985. Currently collaborating with international healthcare providers around the world, Cerner has more than 1,700 Cerner Millennium applications that are live and creating value for clients, including National Health Service (NHS) Great Britain, the state of New South Wales in Australia, the Canadian Infoway, the Ministry of Health in Malaysia, and the General Authority for Health Services for the Emirate of Abu Dhabi.
Oracle: The Information Company

For nearly three decades, Oracle has provided the software and services that let organizations get the most up-to-date and accurate information from their business systems. Oracle spends almost US$3 billion annually in organic research and development to back up its commitment to innovation and continuous product improvement. With customers in more than 145 countries, Oracle is helping governments and businesses around the world benefit from information-driven healthcare solutions.

Oracle is helping healthcare organizations around the world meet the ever-changing demands of patients, caregivers, and member communities. Oracle’s comprehensive enterprise applications are in use in 10 of the top 12 Fortune Global 500 healthcare organizations.

Industry-Leading Applications and Delivery

Oracle delivers integrated business solutions that address both operational needs and customer and supplier processes. Oracle offers solutions for enterprise resource planning (ERP), CRM, and other key areas, including enterprise performance management (EPM) and supply chain management.

Oracle solutions are complete, open, and integrated. Delivered on an open standards platform, Oracle Applications are helping IT organizations lower the cost and risk associated with extra staffing, system extensions, and integrations to specific third-party systems by reducing the number of systems to buy, leveraging existing investments, and decreasing the cost and complexity of integrating applications. In addition, Oracle’s Applications Unlimited program lets customers decide when to upgrade their applications based on the needs of their business, rather than on a predetermined schedule from Oracle.

International Solutions for the Healthcare Industry

Around the world, thousands of healthcare organizations are already using Oracle Applications. For example:

- Oracle HCM applications provide the electronic staff record and payroll solution for all 1.3 million employees in NHS England and NHS Wales in a single instance
- One of the most prestigious healthcare providers in the United States, the Lahey Clinic Medical Center in Burlington, Massachusetts, uses Oracle ERP applications to support its financial and administrative processes
- ParkwayHealth, the largest private healthcare provider in Singapore, uses Oracle ERP applications to support its financial, supply chain, and administrative processes
Working Together to Solve Healthcare Challenges

Cerner and Oracle provide a single IT solution for healthcare that consolidates all clinical, administrative, and financial information into one data infrastructure. By building on Oracle's database and application server technology, Cerner combines its healthcare applications with Oracle's internet-enabled, back-office applications. The Cerner-Oracle solution uses a common architecture to improve overall communication and data sharing. It provides seamless integration to other Cerner solutions and provides multiple access points to multiple caregivers during and after the care process.

With an Oracle–Cerner solution, healthcare organizations can

• Enhance the patient experience and support the choice agenda so that more patients are attracted to the provider. They can improve patient care and reduce medical errors by improving the quality of their data and business processes.

• Provide one clinical patient record throughout the continuum of care. By extending and evolving the care process from isolated incidents to ongoing relationships, providers can include care outside of clinical setting as well as self-care.

• Reduce paperwork so staff members have more time for direct clinical care.

• Make more-effective decisions using real-time information to improve financial visibility and better manage cash flow. In addition, they can accurately calculate the costs of rendering care—including case-rate analyses and per diems.

• Use multiple approaches to manage resource demands and improve the use of resources. They can improve the management and development of healthcare staff to increase retention, maximize regulatory compliance, and enhance patient care and they can increase the efficiency of materials management by streamlining many of the internal processes and redirecting savings to patient care.

• Ensure that the organization is using industry best practices. They can assess contracting opportunities and enforce contractual compliance.

• Increase access to health information and services through streamlined, fully integrated clinical, administrative, and financial processes and then securely deliver information tailored to all levels of healthcare professionals

With their shared commitment to enabling outstanding healthcare delivery, Oracle and Cerner are continuing to deliver information-driven healthcare solutions to healthcare providers and patients around the world.
Contact Us

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