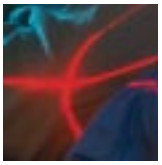
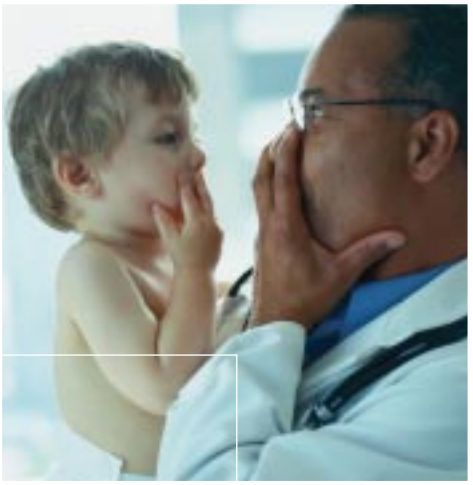


Oracle Solutions for Healthcare

Connecting the Healthcare Community



ORACLE®

Oracle Solutions for Healthcare

> "Forced to operate under extremely constrained margins, healthcare organizations, globally, find it increasingly difficult to focus on delivering quality patient care while having to contend with limited reimbursements, workforce shortages, and soaring costs. Serious challenges to the industry's viability are coming from all quarters. The viability of many of the industry's stakeholders will be challenged by dynamic market drivers and emerging regulations."
>
> — MIKE DAVIS
> Managing Vice President
> **Healthcare Research and Advisory Service, Gartner, Inc.**

IMPROVING THE PROGNOSIS

Healthcare organizations confront enormous challenges: spiraling costs, staffing shortages, increasingly strict regulatory requirements, rising patient expectations, constrained reimbursements, and more.

These pressures and demands are pervasive throughout the industry and cut across all geographies, whether your organization is a payer or provider or in the public or private sector. Yet, most of the challenges your organization faces are permutations of one basic dilemma: How do you provide the highest-quality care and also fulfill regulatory requirements while contending with rising costs and limited resources?

In short, how can you *do more with less?*

Healthcare organizations are now seeking solutions that can automate and integrate business processes, accelerate staff hiring and training, lower supply chain costs, improve financial information, enable information sharing across the organization, enhance service to consumers, and ensure the security and privacy of patient information. The challenge is to do all this while still increasing the quality of care. Sound like an impossible order to fill? It's not.

Thousands of the world's most successful companies, including healthcare organizations, are already relying on Oracle products and services to accomplish precisely that—and they're saving millions of dollars. Why Oracle? Because Oracle delivers scalable, reliable, and secure database software and integrated business applications that can provide quality information and transactional efficiency—at a lower total cost of ownership.

Oracle applications are built on a common technology platform and use all the capabilities of the Oracle Database. Because the applications are engineered to work together, you can easily share information across all applications—and you gain complete automation and integration. This enables your organization to improve efficiencies across clinical and nonclinical business functions. You can simplify your operations, drive out complexity, and drive down cost.

HOW TO KNOW MORE, DO MORE—AND SPEND LESS

In an industry that relies on the sharing of data across a labyrinth of departments, geographies, disciplines, and delivery settings, information is the lifeblood. You need to understand how your organization is performing in real time and across all functional areas. Otherwise, how can you understand how your case mix is affecting your financial position? How can you staff your nursing units optimally and measure the quality of care rendered, when the metrics for quality reside in disparate systems? And how can you compare your overall performance with industry benchmarks?

Particularly in more-complex organizations with multiple points of delivery, it is essential that you view these performance measures at the individual and aggregate levels. You need one view across the organization. To achieve this holistic view, you can spend millions of dollars attempting to integrate numerous "best of breed" business applications and still not get the desired results. Your data will remain fragmented, and you will actually be paying more to know less. Data fragmentation is the No. 1 IT problem plaguing healthcare organizations today.

With Oracle, you can benefit from an integrated architecture that provides consolidated information—across all functional areas, service lines, and geographies. Only Oracle uses a single, unified data model that stores information for all applications in one place, giving you a single version of the truth. You can have a single source of data on employees, patients, suppliers, and services—so that everyone within the hospital, trust, integrated delivery network, or health plan is accessing the same data.

This allows for a single view of patient information, minimizing the likelihood of error and reducing redundant data entry. This means not requiring patients to register twice: once when they enter the hospital and again when they get their blood drawn or X-ray taken. For the payer, it means being able to look at member benefit information, claims data, and clinical information such as lab and PBM (pharmacy benefit management) data. Your organization can get accurate information at the right time and at a much lower cost. With Oracle, your executives and providers can know more and do more—while spending less.

"I had a vision for our implementation of Oracle *i*Recruitment: that it would not be unrealistic for hiring managers to post a job in the morning and get résumés in the afternoon. And we're doing it. We've also got a larger candidate pool, higher-quality candidates, lower stress for our hiring teams, and an improved image in the marketplace."

— JOE TONN
HRMS Manager
Oregon Health & Science University

INDUSTRY CHALLENGE

Workforce Management

Healthcare organizations face an ongoing challenge to recruit, hire, and train the staff required to support the organizational mission. It is not uncommon to find vacancy levels of up to 15 percent or more for all posts—and turnover rates of 20 to 25 percent for all employees per year. Moreover, regulatory agencies specify training and licensing requirements that healthcare organizations must administer. Improperly trained or unqualified personnel expose the organization to regulatory sanctions or legal action. Many provider organizations have had to hire contract labor to meet staffing requirements, with the associated costs—and administrative headaches—that go along with a contractor workforce.

FACTS

- William Beaumont Hospitals streamlined its human resource operations from more than 300 different processes down to fewer than 90.

"We identified a return on investment—on the supply chain side of ERP, in particular—that, conservatively speaking, will total in the neighborhood of US$4 to 5 million a year."

— PAUL PEABODY
Vice President and Chief Information Officer
William Beaumont Hospitals

OHSU

Oregon Health & Science University (OHSU) dominates the healthcare landscape in Oregon. In 2002, OHSU standardized its business applications on Oracle E-Business Suite to achieve simpler, more-centralized management of its operations. With Oracle *i*Recruitment in place, the time to fill vacancies has dropped dramatically. General staff vacancies stayed open for 49 days in the summer of 2002, but the next summer, after Oracle *i*Recruitment was up and running, those jobs filled in 30 days, for a 40-percent improvement. The average of 15 applicants per vacancy in summer 2002 jumped to 25 in summer 2003, for a 65-percent increase. Greater efficiency has translated into significant savings.

ORACLE SOLUTION

Streamline Your Human Resource Processes

With Oracle Human Resources, you can improve the efficiency of human resource processes by sharing workforce data across the entire organization. Oracle Human Resources can meet the most-complex needs of healthcare organizations, such as managing differential staffing by shifts and managing a contingent workforce.

More specifically, Oracle *i*Recruitment simplifies the process of recruiting, reducing the time to hire and cutting the number of open vacancies. It allows you to manage the entire recruiting cycle via a self-service interface:

- Managers can open job vacancies, search for candidates, manage the interview process, and more.
- Recruiters can extend recruiting functionality to managers and focus on promoting the organization's employment brand to a target candidate pool.

Staff retention is a key objective of provider organizations. Employees may want to leave for a variety of reasons, but two preventable ones are possessing inadequate skills to accomplish their jobs and having poor compensation or benefits plans. With Oracle Training Administration, you can manage any development activities that improve skills, such as continuing education, remote-site learning, work experience, formal classes, and external seminars or conferences. You can also manage the enrollment process, class size, and financials associated with the training. And, with Oracle *i*Learning, a complete internet learning system, you solve the problem of delivering fast and consistent learning solutions across your organization. Your employees will appreciate the ability to customize their benefits when using Oracle Advanced Benefits, which provides the greatest value to each employee through flexibility and benefits choice.

INDUSTRY CHALLENGE

Weak Links in the Supply Chain

Research suggests that the greatest opportunity for a healthcare organization to reduce costs is in the supply chain. For example, according to the Healthcare Financial Management Association's *Healthcare Supply Chain 2002 Survey Results*, "Supplies account for roughly 25 percent of an organization's operating budget. Considering the total cost of hospital materials management, adding labor and logistics to materials and equipment costs, this jumps to 35 to 45 percent."

Healthcare has been a late adopter of enterprise resource planning (ERP). Processes are still not automated and integrated from end to end, and organizations still rely on paper-based processes. Hospitals often have a fragmented supplier network that results in the negotiation and maintenance of hundreds of supplier contracts, many with complex tiered-pricing arrangements—all reported on paper. In addition, requisitioners and managers are unaware of expenses versus budget, so they are unable to control expenditures. There is no easy way to consolidate orders, identify preferred suppliers, and take advantage of quantity discounts.

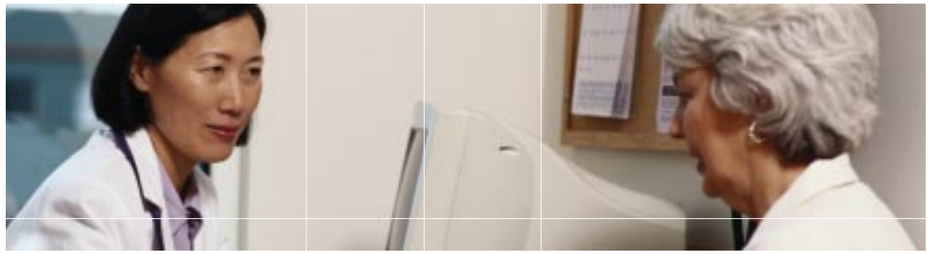
ORACLE SOLUTION

Lower Your Costs with Integrated Supply Chain Management

Making sure the right supplies are available at the point of care at the right time is critical—both to ensure the quality of care delivered and the efficiency of the healthcare organization. Oracle can help with this. Oracle Supply Chain Management is the only completely integrated solution that delivers value in five

FACTS

- Waitemata District Health Board saved more than US$5.4 million in the first three years after implementing Oracle *i*Procurement.



Sandwell & West Birmingham Hospitals NHS Trust

Sandwell

Following a merger in 2002, Sandwell and West Birmingham Hospitals National Health Services (NHS) Trust, one of the largest NHS teaching trusts in the United Kingdom, sought to cut overhead and improve financial control. "The legacy systems we had inherited were not integrated or Web-enabled, resulting in silos of information held in different formats, which led to process inefficiencies," says Tony Wharram, Sandwell's deputy director of finance. "We needed a single information database; standardized, automated processes to drive down costs; and advanced reporting tools." Wharram predicts that Oracle *i*Procurement will reduce transaction processing costs by 50 percent.

critical operational areas: planning, procurement, sourcing, order fulfillment, and supplier relations. This enables you to improve the entire process of procuring medical supplies and services. With Oracle Supply Chain Management, you can do the following:

- Maximize efficiencies by automating and streamlining procurement processes
- Introduce more control into the procurement process, including budgetary control, contract enforcement, and best practices
- Save money by collaborating more effectively with suppliers and lowering the cost of each transaction
- Track critical performance indicators via personalized views of purchasing portals
- Allow your suppliers to access their accounts via the Web for improved supplier relationships
- Manage purchasing contracts and compliance

INDUSTRY CHALLENGE

Financials: Too Much Data, Not Enough Information

Today's healthcare organizations are complex, with multiple operating units or subsidiaries—many with a different tax status. It can be challenging to get timely and accurate information about the financial performance of each business unit or to gain more visibility into the costs of operation. In addition, healthcare systems worldwide must contend with healthcare financing reform and declining funding and reimbursement. In this environment, it is critical that hospitals have a good understanding of costs. This is particularly true when dealing with fixed or prospective payment systems. However, in hospitals today, costs are tied to the organizational structure—such as departments—but activity and treatments follow care pathways that cross multiple departments. Therefore, it is very difficult to understand exactly how much it costs to deliver a particular treatment.

ORACLE SOLUTION

Take Control of Your Finances

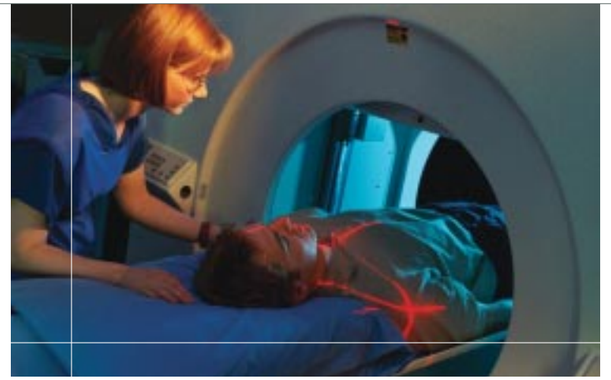
Oracle provides an integrated solution that can give you complete visibility into your finances—as well as control over all transactions—while increasing the efficiency of your operations. You can close your books faster, make better business decisions based on real-time data, and reduce the overall cost of running your organization. Plus, increased speed and transparency in your financial reporting can help you meet today's corporate-governance demands. Part of the Oracle E-Business Suite, Oracle Corporate Performance Management is an integrated solution that provides the following key capabilities:

- Financial management
- Cost structure modeling
- Analytical reporting
- System integration

Financial management is the foundation of any corporate performance management solution. A solid financial management solution enables enterprisewide data management and allows integration with other enterprise solutions, as well as with third-party systems. Oracle General Ledger is a comprehensive financial management solution that provides advanced financial controls and data collection for the entire enterprise. Oracle General Ledger also integrates with Oracle Activity Based Management, which enhances the process of developing strategic costing models and gives you the ability to use not only the account balances but also the statistical and other transactional data captured in Oracle General Ledger.

FACTS

- Sandwell and West Birmingham Hospitals National Health Services Trust reduced the time needed to process general ledger feeds—from three or four days to just minutes.



"Oracle had the total package... A doctor can log into the portal from home, use single sign-on to navigate to the Obstetrics part of the site, and view a patient's fetal monitor in real time, for example. At the same time, the doctor can check e-mail, calendars, and data files."

— ALAN WAMSER
System Analyst
Hays Medical Center

INDUSTRY CHALLENGE

Lack of Interoperability

Today's healthcare organizations seek technology solutions that enforce industry standards and best practices. They are realizing the importance of interoperability between clinical, administrative, and financial business processes. They are trying to alleviate the burdens of data fragmentation, redundant data entry, cumbersome administrative processes, and lack of collaboration or information sharing across organizational boundaries.

ORACLE SOLUTION

Share Information Across Business and Clinical Functions

The Oracle Healthcare Transaction Base is a service framework that helps you integrate, develop, and operate healthcare applications across the healthcare continuum. It enables you to capture information from multiple standalone and disparate applications into a common database, with a common nomenclature. This allows you to access one repository for a single, complete view of information that previously resided in separate applications. Armed with this single source of truth, you can analyze the cost of current clinical practices and view the progress of your organization in conforming to best-practice standards; capture all the information needed to assess various contracting opportunities; and calculate your costs of rendering that care, including case-rate analysis, per diems, and so on.

With the ability to look across clinical and financial systems, payers and providers currently focused on outcome measures will be able to perform more-accurate assessments of the return on investment associated with that effort. Oracle's healthcare information platform provides the blueprint for the integration of patient information and healthcare services at the design level—across organizational boundaries—and serves as the model for allowing data to flow from one department to another.

FACTS

- Hays Medical Center serves its physicians' needs and saved US$185,000 in licensing and maintenance costs by consolidating from ten servers to three, and by eliminating the need to maintain PC systems.

This helps you provide a more seamless environment for communicating with your constituents and allows you to meet the requirements of public agencies that are requiring improvements in information sharing, collaboration, and consolidation. Moreover, it radically simplifies comprehensive reporting across the various systems.

INDUSTRY CHALLENGE

The Rise of Consumerism

The healthcare industry is seeing a sharp rise in consumerism. Patients want the ability to schedule their own services; gain access to medical, provider, and health-plan information; and join online patient communities. Payers, meanwhile, are looking to the Web as a means of being more proactive in the care-management process. Providers want to capture, review, and share patient information from the point of care, thereby minimizing redundancies in testing and making the necessary information available when needed.

ORACLE SOLUTION

Empower the Healthcare Community

Oracle Application Server Portal, in conjunction with Oracle Collaboration Suite, gives you secure, reliable connectivity, so you can provide access to internal as well as external communities. Whether for employees accessing their e-mail, staff submitting hours and schedules, providers reviewing critical patient data, or patients and plan members accessing their claims or benefit information, Oracle Application Server Portal provides a secure means for sending, receiving, and sharing necessary information.

Used with Oracle Healthcare Transaction Base, Oracle Application Server Portal allows your community to access information across disparate clinical, financial, and administrative systems. This broad view provides for increased productivity, closer collaboration, reduction in paper-based procedures, and enhanced customer satisfaction. Only Oracle provides a complete, integrated, low-cost business intelligence infrastructure delivered through a portal. Moreover, Oracle Application Server Portal provides secure access, protecting the privacy of your patient information.

Harvard Pilgrim HealthCare
Making great health care a little easier.™

HPHC

Harvard Pilgrim Health Care (HPHC), one of the oldest healthcare plans in New England, has a decidedly modern vision. Its goal is to be an "eHealthPlan," a healthcare company that uses e-business technology to deliver better services at a lower cost. Oracle Application Server Portal provides the strategic platform for its Web infrastructure, according to John Dunne, HPHC's deputy chief technology officer. "Personalization, customization, and content management were expected givens from any product—but Oracle Application Server Portal offered all these features, plus the promise of full integration with Oracle E-Business Suite and an open, standards-based architecture."

"Oracle software met our security requirements for the Patient Centered Access to Secure Systems Online (PCASSO) project with the least amount of complexity. Oracle Label Security, a security option for Oracle Database, is critical to PCASSO. From the outset, we wanted to use label-based access control to separately protect several sensitivity levels of medical information."

— DIXIE BAKER, Ph.D.
Vice President, Chief Technology Officer
Enterprise and Health Solutions Sectors
Science Applications International Corporation

INDUSTRY CHALLENGE

Protecting Your Data

Security has emerged as a global concern. In the United States, for example, the Health Insurance Portability and Accountability Act (HIPAA) sets forth requirements and regulations concerning access to and storage, usage, and transmittal of patient data. Similar privacy regulations have been enacted in the United Kingdom, Canada, and other countries. As more and more patient information is digitized and shared across networks, the need to protect and manage confidential records has become paramount.

ORACLE SOLUTION

Unbreakable Security

Oracle is the industry leader in providing unbreakable security. In fact, Oracle has 17 independent database security evaluations, including certifications from the U.S. Central Intelligence Agency and the National Security Agency. No other vendor can make this claim.

Recently Oracle completed the International Common Criteria (ISO 15408) security evaluation at Evaluation Assurance Level (EAL) 4, the industry's most rigorous assessment for commercially available software.

It takes years to go through the database security evaluation process: this shows Oracle's commitment to security as a core business value. Security has been built into Oracle products from the very beginning, not just retrofitted or bolted onto products already on the market.

Oracle's secure technology allows you to protect sensitive healthcare information, assign privacy labels, and control access to enterprise data. Moreover, Oracle builds security into all of its products—not just into Oracle Database but also into Oracle Application Server, Oracle Collaboration Suite, and Oracle E-Business Suite.

OUTSOURCE—AND LOWER YOUR IT COSTS

Instead of operating as if you're in the IT business, why not let the experts host your IT systems, so you can focus on your core business? Oracle has several outsourcing options to choose from. All are designed to lower your costs while giving you better information and allowing you to retain the level of control you desire.

Oracle Outsourcing puts your IT infrastructure in the hands of dedicated Oracle experts—allowing you to achieve your IT objectives without the headaches. In fact, you could be spending up to four times as much to manage your application software as you spent on the software itself. Oracle Outsourcing lowers IT maintenance costs and improves the performance, security, availability, and change management of your systems. As the company that developed the software, only Oracle can offer outsourcing customers the following:

- Higher availability, improved security and performance, and easier upgrades
- Faster service—up to 50-percent-faster resolution of support requests; proactive problem resolution
- Predictable costs—up to 50-percent reduction in software-management costs

THE RIGHT PRESCRIPTION

With the healthcare industry experiencing significant constraints on its bottom line, technological solutions that create efficiencies, improve business intelligence, and maximize the utility of existing investments are necessary for survival.

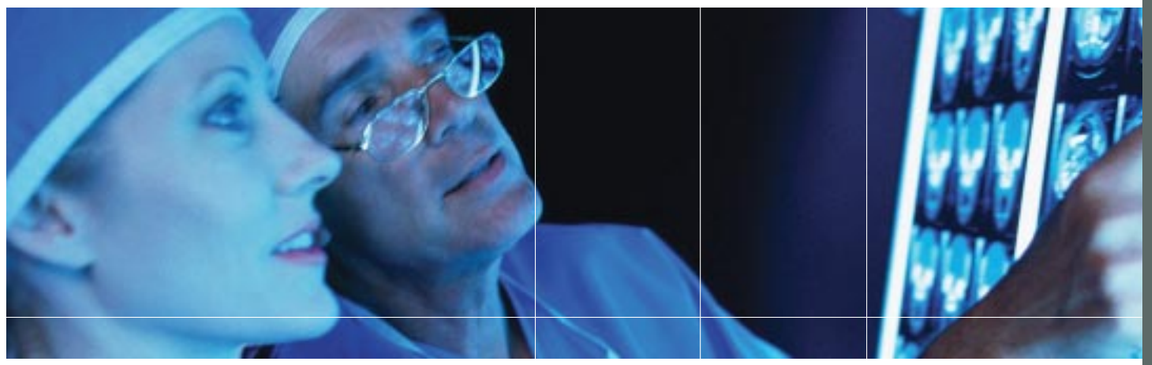
Oracle products are helping address the needs of your industry. With Oracle, you can manage your costs more effectively. You can know more, by using integrated business intelligence; do more, by boosting performance; and spend less, by gaining greater efficiencies.

Oracle's Commitment

Oracle understands the challenges that healthcare organizations face in today's competitive environment. We've provided focused expertise and innovative products to successful healthcare organizations around the globe. Let us help your organization achieve its objectives.

NEXT STEPS

For more information on Oracle solutions in healthcare, please visit oracle.com/industries/healthcare.



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