

White Paper

IT Outsourcing Benefits for Healthcare Companies

SUMMARY

Perhaps no other industry could depict better the benefits of IT than healthcare. Nowadays most healthcare organizations have already invested in IT outsourcing, for anything from Telecommunication and Wireless, to Application Data Development (i.e. LIMS, SOA), or even Business Process Management. How much do you know about the new HIPAA regulations and keeping up with them? Gartner analysts predict that by 2009, **healthcare investments in IT** will increase by more than **50 percent**, which could enable clinicians to reduce the level of preventable deaths by 50 percent by 2013.

TABLE OF CONTENTS

- *Industry overview*
- *Healthcare IT challenges*
- *Reasons for IT outsourcing in healthcare*
- *Outsourcing vs. insourcing – realizing value*
- *Three major factors driving HCOs to outsourcing*
- *What can be outsourced*

INDUSTRY OVERVIEW

Healthcare is one of the largest industries worldwide. Diagnosing and treating patients is the main function of healthcare and, to that end, healthcare organizations focus on two primary goals: **delivering excellent patient care and maximizing staff efficiency**. Any improvement in the patient's experience – from medical outcome to check-in to recovery and release – gives the patient a reason to return or to recommend the facility to family members.

Yet, staff members are being asked to do more in a wider range of areas. Healthcare organizations must walk a fine line to balance the number of non-care duties a staff member can handle while still providing quality patient care. One of the most important functions in achieving the proper balance **is information technology (IT)**.

HEALTHCARE IT CHALLENGES

Healthcare lags behind other industries in implementing IT solutions for many reasons. First, the healthcare industry is highly fragmented. It's composed of two segments—payers and providers. On the provider side, you have everything from sole practitioners to large multispecialty practices and from small, rural hospitals to multi-facility health systems. This kind of fragmentation creates barriers to the flow of information across the value chain.

More importantly, IT has never been considered a critical part of healthcare operations. It has traditionally been viewed as an administrative function. In recent years, however, **IT has played a more important role in the delivery of quality patient care** and, as a result, healthcare organizations are increasingly relying on it as an essential operational component.

For some years now healthcare providers have been working toward implementing an electronic medical records (EMR) environment. This technology will reduce medical errors, make it easier to collect patient data, and improve efficiency and the bottom line for hospitals, clinics and physician practices. Providers must also be HIPAA-compliant. HIPAA (Health Insurance Portability and Accountability Act of 1996) in part, requires the establishment of national standards for electronic health care transactions and national identifiers for providers, health insurers, and employers. HIPAA was also put in place to protect patient data and privacy — this makes **security** a priority for the largest to the smallest health care provider. It also means having network systems and staff equipped to handle records security issues.

REASONS FOR IT OUTSOURCING IN HEALTHCARE

But with new technology there is always a learning curve and **many providers just aren't in a position to hire and train inside IT staff**. They would rather **concentrate on their core business**: providing healthcare services. That is why many organizations have chosen to **outsource their information technology (IT) services**. According to a survey conducted by the Outsourcing Institute, the **top five reasons** why companies outsource certain business functions include:

1. Reducing and controlling operating costs;
2. Improving company focus;
3. Gaining access to world-class capabilities;
4. Freeing up internal resources for other purposes;
5. Resources are not available internally.

And these apply to healthcare organizations also. Other industries have discovered earlier that outsourcing IT systems to a professional IT service provider offers many benefits.

As a risk-sharing partner, the IT service provider will introduce **best-practice solutions** to the healthcare organization, resulting in improved service levels—not only in IT, but throughout the organization. Additionally, an outsourcing partnership ensures **availability of needed skill sets**, particularly important during times of technological change. Other benefits include **predictable pricing** over the long term as well as flexibility in ramping up and ramping down resource levels. For healthcare organizations that are facing extensive technology changes and decreasing funds, these benefits could be just what the doctor ordered.

OUTSOURCING VS INSOURCING – REALIZING VALUE

First of all, every HCO (Healthcare Organization) must determine if its realized business value can be enhanced by outsourcing rather than in-sourcing. Business value may be gained from **economics** (cost savings, cost avoidance, leveraging expensive skill sets and expertise, or simply making costs more predictable), **service quality** (improved at the same cost or maintained at a lower cost), or **management factors** (more-manageable environment, achieving behavioral changes, leveraging internal staff, or lower risk approaches).

Not every provider or payer has the same needs, or degree of needs, for outsourcing. Not every HCO is prepared for the new requirements imposed by outsourcing.

If the business value of an outsourcing arrangement justifies proceeding, an HCO must avoid the typical problem areas that others have encountered with outsourcing. Unclear business objectives before the contract is signed are the most-likely causes for dissatisfaction or cost overruns. The contract must be actively managed, and HCOs

often do not spend adequate time and resources managing the outsourcing arrangement. You can't just "flip the outsourcing switch" and automatically derive value.

Not only must the **outsourcing vendor's track record** be examined for performance, both parties must be flexible throughout the contract because technology and business needs will change over time, such as renegotiating the contract pricing and service-level agreements (SLAs) on a periodic basis. Clear objectives and on-going attention avoid unrealistic expectations.

An HCO must also appropriately address the critical success factors — initially and over time. Due diligence in regard to the outsourcing vendor includes examining its track record for process competencies, geographical coverage, healthcare experience, technical competencies, contracting flexibility and culture/lifestyle impacts on outsourced employees. Again, understanding your own HCO is the foundation for evaluating outsourcing opportunities.

THREE MAJOR FACTORS DRIVING HCOs TO CONSIDER OUTSOURCING

Business Drivers

As HCOs (HealthCare Organizations) look for the means to reduce their costs, some have focused on core competencies, concluding that IS organizations are not "core." Others have been frustrated with IT strategies not aligning with business goals, concluding that an outsourcer could align them better. Some HCOs believe that to be competitive, to capitalize on new opportunities or to have world-class processes requires a level of expertise that can be more-easily and less-expensively obtained through outsourcing.

Industry Drivers

In U.S., for instance, The Health Insurance Portability and Accountability Act (HIPAA) and the U.S. Balanced Budget Act have reduced access to funding, forcing HCOs to find new, creative ways to reduce costs (volume increases are seldom an option). This is exacerbated by constantly changing criteria for success and by new forms of competition — innovation is becoming a differentiator.

IT Drivers

HCO boards of directors and executives are demanding more effectiveness for IT expenditures. Sourcing partners are believed to shorten implementation times and sometimes just enable an HCO to "gain control of IT." Other demands include improved service levels (at less or equal cost). A more-positive factor is supplementing IT resources with additional expertise, particularly if IT is viewed as mission-critical for success.

With so much to be done, HCOs are recognizing that they cannot do it all in-house, and they cannot always afford the pre-investment in the technologies and infrastructure required to build everything internally. The tension between "doing more" and "doing it with less" is creating new realities for HCOs, which can no longer ignore sourcing approaches that seem to have worked in other industries.

WHAT CAN BE OUTSOURCED

Latest Gartner research studies show that healthcare organizations plan to increase corporate spending over the next two years in the following key areas:

- [Applications Development](#)

The *Application Development* area includes solutions like:

- **Electronic Medical Records (EMR)**, which refers to an individual patient's medical record in digital format (this is accessed through a computer, usually in a network). EMR systems are believed to increase physician efficiency and reduce costs, as well as promote standardization of care
- **Laboratory Information Management Systems** is a type of software developed especially for the healthcare business, with the purpose of automating the process of receiving data from laboratory instruments, processing and storing this information
- **Software Oriented Architecture** enables all of your applications to work together, and "communicate" to each other. This allows you to respond more quickly and cost effectively to changing market or environmental conditions

- [BPM](#)

Business Process Management for the healthcare industry refers to services like: claims processing, financial management, member services, provider services, case management, disease management, utilization management, decisions support and analytic reporting.

- **Warehousing**

Warehousing enquires processes and tools to define and manage data definitions, cleanse bad data contained in source systems, integrate data from diverse source systems, and organize the data into meaningful subject areas (i.e. populations or disease states). (www.gartner.com)

- **Operations Management**

Operations Management integrates quantitative and qualitative aspects of management to determine the most efficient way of supporting patient care delivery. It handles eliminating waste and defects. For example a hospital wastes a lot of time and money when staff or patients have to wait or with transportation, inventory, motion, overprocessing and of course, defects. Operations Management effectively cuts these costs.

- **Security**

Security is becoming more and more difficult, as healthcare organizations are required to secure access to confidential patient information, while allowing, at the same time, rapid and mobile access to the information for its employees. HIPAA itself is changing and healthcare organizations have to keep up with the dynamics of the security industry. Outsourcing IT security often proves to be the best choice, as it offers specialized personnel for keeping your facilities' security up to date, and on the cutting edge. The role of a security system is allow access to medical files and other organizational documents to authorized personnel only, by creating a custom system for each healthcare organization.

- **Wireless**

Telecommunication, through Wireless LANs, VoIP deployments and RFID tagging (either of patients, or hospital assets), as well as extending care to remote patients via telemedicine applications, promises to lower healthcare delivery costs and ease the medical process.

- **CRM**

The *Customer Relationship Management* solution helps hospitals, or other healthcare organizations improve the quality of the relationship with their patients (clients), suppliers and its own staff. A CRM application, for healthcare institutions helps lower the costs of managing key relationships, saves time through shared schedules and advanced search options, simplifies the physician credentialing process and increases staff retention rates.

Especially the **software applications development** is starting to gain more and more attention from healthcare organizations. Research studies proved that HCOs that adopt collaborative models for patient care management will improve profitability by 10%.

Laboratory Information (Management) System (LIS/LIMS)

A software application developed exclusively for the healthcare industry is LIS (Laboratory Information System), a type of software which handles receiving, processing and storing information generated by medical [laboratory processes](#). There are as many variations of LIS as there types of lab work. Some vendors offer a [full service solution](#) capable of handling a large hospital lab's needs, while others specialize in specific modules. Disciplines of laboratory science supported by LIS' include [hematology](#), [chemistry](#), [immunology](#), blood bank (Donor and Transfusion Management), surgical [pathology](#), [anatomical pathology](#), [flow cytometry](#) and [microbiology](#). A LIMS and a Laboratory Information System (LIS) perform similar functions. The primary difference is that LIMS are generally targeted toward environmental, research or commercial analysis, such as pharmaceutical or petrochemical, and LIS are targeted toward the clinical market (hospitals and other clinical labs). (www.wikipedia.org)

The laboratory management information system is used in scientific and medical labs to track the samples or specimens each step of the analytic process. The system is different from vendor, to vendor, but it is basically designed to manage and organize the testing procedure, in order to help the technical staff find and retrieve information rapidly. Laboratory information management systems (LIMS) software helps medical and other scientific laboratories improve various quality control (QC) and quality assurance (QA) procedures by automating activities such as entering data from instruments. LIMS can also be used to help laboratories achieve accreditation based on the technical requirements of ISO/IEC 17025 (ISO - International Standards Organization; IEC - International Electrotechnical Commission), "General Requirements for the Competence of Testing and Calibration Laboratories."

Healthcare IT mainframe is also a software product which many healthcare organizations have had to purchase from an IT service provider. The healthcare mainframe market has grown and changed over the years. The pressure of the health-insurer to manage or reduce costs resulted in an increase of hospital use of mainframes in areas such as billing and quality management. Also, the 1996 HIPAA regulations have demanded better security of patient records, an area in which the mainframe excels.

Software Oriented Architecture

Despite of the benefits that many IT applications provide, users have encountered e recurrent issue. Applications don't communicate to each other. As outlandish as it may seem, this is a real problem, as the need for centralized information on patients is most often vital. Another problem hospitals are faced with is the large amount of paper based information kept on each patient. This makes it difficult for the medical staff to find specific information, as one-inched thick files are not uncommon. "The hospital's IT infrastructure has been assembled over the course of the last 18 years, with multiple stovepipe applications and no single application model. As a result, we had a fragmented view of our patients, clinical information, administrative systems, and other critical systems", says Tony Kenny, the Beaumont Hospital's (Ireland) IT project manager.

In order to solve these problems, SOA (Service-Oriented Architecture) is being adopted now by more and more healthcare facilities. These IT programs allow different applications to exchange data with one another, therefore SOA can help businesses respond more quickly and cost effectively to changing conditions. SOA does not require the re-engineering of existing systems, moreover, the existing processes can be combined with new capabilities in order to form a library of services that are used to compose solutions. Services are now able to directly support business processes as they are introduced, and incorporated as system solutions.

In an interview about how SaaS (Software as a Service) helped her company, Diane Tennant, an administrator at Marianhill Inc. said: "You don't want the staff spending time on charting. That's why I think the project is so valuable, staff members are actually spending more time with the resident, not flipping through papers and papers and papers trying to document the care they are providing."

Due to the critical nature of healthcare services, **outsourcing application development** proves to be the best approach since external providers already own the required skills, expertise and established processes that can emphasize the strong focus on quality and, at the same time, ensure a **cost effective** solution.