Reducing Costs
While Improving Patient Safety

How healthcare providers are cutting costs and improving patient care by integrating IMS, Compliance, Business Intelligence, and Mobility solutions

EXECUTIVE SUMMARY

According to Gartner, the pace and magnitude of IT-enabled changes in the healthcare sector will increase dramatically during this decade. Highly available, aware and responsive infrastructures are fast becoming the focus of CIOs, with attention shifting to high-velocity medicine in a high-performance work setting. Consequently, real time health systems, automation, interoperability, and mobility are all becoming issues of critical importance in the current healthcare IT landscape.

Healthcare Delivery Organizations (HDOs) face several key issues such as improving clinical quality and patient safety, cost containment due to budget cuts, IT infrastructure modernization, leveraging government incentives and investments in Health IT, and setting up Health Information Exchanges (according to a Gartner report). In order to achieve cost efficiencies and improve patient outcomes in this difficult environment, they will need the help of integrated, turnkey IT infrastructure solutions and strategies that deliver agility and innovation across their organizations.

This paper will examine several challenges faced by healthcare providers and the many advantages of implementing a holistic, turnkey and integrated Infrastructure Management Solution (IMS) aimed at reducing costs while simultaneously improving compliance and patient safety.

INTRODUCTION

Increasing demands on the quality of healthcare, combined with longer life expectancies is causing IT to play a pivotal role in delivering value and improved business outcomes. Some of the key drivers in the current Healthcare Provider market are: compliance, cost reduction, improving operational efficiency, improving reimbursement outcomes, and increasing consumer sophistication. HDOs are turning to IT for solutions that are strategically aligned with these drivers to help them cope with these crucial aspects.

Listed below are some of the important IT infrastructure issues and application areas that CIOs are currently concerned with:

EHR implementation

Today, a real time infrastructure is critical to a successful Electronic Health Record (EHR) implementation. This requires highly aware, available and responsive systems that can communicate, collaborate, and consistently operate at higher levels. Gartner research indicates that HDOs that are on the lookout for EHR systems check for best practices to implement, while HDOs that already have an existing EHR are more interested in learning about how to optimally manage and use them to achieve their principal goals of improved compliance and quality, reduced cost, and enhanced patient outcomes.

Regulatory compliance

Healthcare providers are faced with a proliferation of compliance requirements that are constantly evolving, and while staying abreast with these changing requirements means further investments in IT infrastructure, they are likely to provide HDOs with improved bottom lines and high-quality patient care when implemented strategically. Some of the major regulatory compliance requirements currently weighing on the minds of CIOs are ICD 9-10 conversion, Meaningful Use, and HIPAA.

Custom application development & maintenance, including mobile application development

The custom application development market is also of critical importance to HDOs as it allows them to address unique business requirements while staying in control of costs and promoting efficiencies. Mobility is moving into the spotlight and the market for mHealth Smartphone applications is expected to gain traction with an estimated 500 million out of 1.4 billion Smartphone users accessing mHealth Smartphone applications by the year 2015, according to research2guidance.

Business Intelligence (BI)

BI is another critical area that HDOs focus on in order to aggregate clinical, financial, administrative, and research data for improved insights and better decision making. In the current environment, as per Gartner, this implies the strategic use of real-time BI to monitor and proactively adjust care delivery systems and processes to optimize availability of resources, and meet the business requirements.

IT Infrastructure and interoperability

With healthcare evolving into high-velocity medicine, wherein new discoveries are incorporated into clinical practice rapidly, HDOs are fast becoming "real-time health systems." They need highly available, aware and responsive infrastructure to deliver access to clinical information as and when clinicians demand access to it.

CHALLENGES

Healthcare in the U.S. is rapidly evolving. Gartner foresees the industry experiencing a shift to value-based models, which is forcing HDOs to measure quality standards better, and improve the quality of care delivered, even while simultaneously reducing costs. There is also a growing awareness amongst the patient population who want to more actively manage their health conditions. All of these changes entail a closer alignment between all the stakeholders in the healthcare ecosystem such as the providers, payers, and suppliers.

Some of the major challenges confronting healthcare CIOs today are: Improving clinical quality, safety, and processes

According to an Institutes of Medicine (IoM) report, a majority of medical errors result from faulty systems and processes, and are not the result of human errors. Inefficient processes contribute to a large percentage of these avoidable errors. Because these errors are caused by system or process failures, it is becoming critical to adopt various process-improvement techniques in order to identify inefficiencies, ineffective care, and preventable errors to improve the quality of care delivered and enhance patient safety.

Setting up Health Information Exchange (HIE)

HIEs are gaining importance and popularity due to their ability to improve patient health and quality of care by enabling the secure exchange of patient data amongst all stakeholders. It also holds potential for reducing costs through this increased interoperability between the stakeholders. However, this cross-organization collaboration is creating new challenges with regard to patient privacy.

Modernizing IT infrastructure

In the dynamic healthcare environment, many organizations are burdened with inefficient and underutilized infrastructure and applications, leading to higher costs and increased inefficiencies. Developing a strategy to modernize ageing infrastructure is becoming essential to cost containment and delivering improved business outcomes.

Dealing with emergence of Accountable Care Organizations (ACO)

ACOs seek to associate physician compensation with his reimbursement with the aim of reducing the total cost of healthcare without impacting quality. This entails closer collaboration within and between HDOs for better coordination of care.

Implementing cost containment measures amid budget cuts

Rising cost pressures and increased budget cuts are forcing HDOs to look for ways to contain costs and improve efficiencies. In an environment of reduced Medicare and Medicaid reimbursements, slashed operating margins are putting the pressure on organizations to improve productivity, efficiency, and effectiveness.

Handling multiple, interconnected challenges

The IT infrastructure required to support clinicians in a real-time health system raises multiple interconnected challenges related to complexity, capacity, performance, availability, privacy and security.

THE SOLUTION

Healthcare players and leaders are turning to IT for solutions to address these multiple challenges and to help them provide improved patient care and safety, even while decreasing inefficiencies and optimizing costs.

The answer to these challenges is **holistic Infrastructure Management Solutions integrated with compliance, automation, and Business Intelligence, aimed at reducing costs and enhancing patient safety.**

GAVS offers the following end-to-end integrated solutions that address the current needs of CIOs at HDOs:

Healthcare IT operations

Our end-to-end healthcare solutions enable you to focus on your core business, while we handle the entire gamut of your growing infrastructure requirements by leveraging our deep domain expertise. Some of the services we offer include data hosting and data collection services, data center operations, clinical and non-clinical application operations, server and storage operations, network and security operations, email and collaboration services, help desk and desktop services, and managed print services.

Custom application development

GAVS employs matured development methodologies & process frameworks by leveraging agile, RUP, iterative, incremental and waterfall models. The custom application development life cycle includes development of portal and web based solutions, legacy and product modernization using SOA, migration from legacy to emerging technologies and process modernization, integrations involving A2A, B2B, B2C, D2D, and Process integrations, mobilization involving applications to device browser, applications for device, operations with application enhancement, and 24/7 support.

Compliance (ICD 9-10, Meaningful Use, HIPAA)

• ICD 9-10 transition

GAVS can help you achieve this complex transition within the stipulated time frame with minimal disruption during the transition. We assess current systems and work processes, conduct feasibility studies, and help with clinical documentation to code diagnoses at the highest level of specificity. We also upgrade clinical practice management systems to accommodate ICD 10 data codes, upgrade electronic medical record systems to accommodate ICD 10 codes, assess and update quality reporting systems to make them ICD compliant, assess payer systems and work processes, and apply changes to remediate impact of ICD 10 conversion.

• Meaningful Use implementation

One of our main goals is to implement a customized and optimized IT Infrastructure solution that is compliant with the Meaningful Use Guidelines and equipped to generate a quick ROI for your organization. These services include clinical decision support system, patient self-management, patient demographics, patient history, lab orders and results, revenue cycle management, claims submission and remittance interface development, HL7 interface development, mobile interface for Computerized Physician Order Entry (CPOE).

• HIPAA regulatory compliance

Our services include HIPAA 5010 assessment and compliance, internet security – email, web and content management, information security audit and implementation, disaster recovery services.

Clinical analytics & reporting

GAVS adopts a structured approach to churn information into competitive assets for our clients. The BI cycle encompasses BI definition, development, operation and strategy. It also includes readiness assessment, requirements analysis, architecture design, data integration, reporting and analytics, transition, maintenance and support, data resource and information resource management, business analysis, and strategy study, and demonstration.

Our comprehensive solution provides users with significant efficiency gains, and allows them to translate and leverage integrations benefits. We offer a wide breadth of rich upgrade and implementation expertise.

EMR & EHR implementation

GAVS has demonstrable experience in designing, building, transforming and supporting mission-critical infrastructure for applications such as Allscripts Sunrise clinical manager, GE RIS/PACS, McKesson cardiology, Cerner lab systems, Siemens Soarian, and various other custom-developed care management applications. We leverage proven methodology and experience to provide our clients pain-free outsourcing and implementation of healthcare IT applications and infrastructure operations.

Mobile application development

Our mobility solutions include strategy assessment, infrastructure development, medi-esigns application, mobile integrations with EMR applications, lab and billing applications, custom-built applications, and application support. Some of the Smartphone platforms we support include Blackberry, Symbian, Windows, Sony Ericsson, Motorola, iPhone and Android.

THE GAVS ADVANTAGE

GAVS provides focused Remote Infrastructure Management Services, integrated with compliance and BI to help you develop, build and manage a business critical IT Infrastructure system that is highly available, reliable, and scalable to meet your growing business requirements. Our end-to-end healthcare solutions leverage access to real time clinical data for improved decision making, and enable our clients to focus on their core business of delivering high-quality healthcare.

We focus on reducing operating costs through innovation and continuous process improvement in order to provide the following enhanced business outcomes:

• Improve quality of care with increased access to relevant patient data

• Enhance decision making process with more information and clinical guidelines available for clinical decision support

• Reduce costs with significant time savings, workflow efficiencies

• Improve ability to qualify for federal incentives

• Increase accuracy in claims processing and management

• Improve coding for diseases and procedures resulting in reduced costs

• Enhance patient safety and satisfaction

• Increase transactional uniformity

• Simplify and enhance your revenue stream

• Streamline your reimbursement procedures

• Fine-tuned and optimized reports executed over several hours to yield output in minutes

• Data integrations from several source systems to generate reports in critical data points to gain an overall picture of healthcare metrics

• Real time analytics to produce an accurate and holistic view of the organization, identify opportunities, gain competitive advantage and improve profitability

• Reduce software development and maintenance costs

• Increase efficiencies through the combination of right tools, technologies, and several man years of development experience

To find out how **GAVS** can help streamline your IT Infrastructure landscape for improved cost efficiencies and enhanced patient safety,
please contact **healthcare@GAVSin.com** or go to **www.gavsin.com**.