

Creating sustainability & value in uncertain times

How healthcare organizations can leverage their data assets
to improve organizational performance



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This economic downturn will run its course, just like all the ones before it. However, the “once in a century” credit crisis that has unfolded over the past year, coupled with changing reimbursement models and patient demographics, could have long-standing impact on healthcare providers. Healthcare finance may never be the same.

These unprecedented challenges require healthcare’s leaders to seek new perspectives and different solutions. Leaders must embrace their role as change agents and create a more agile organization. The ability to rapidly identify performance issues and act on them is increasingly critical – as every day that a hospital continues inefficient or low-quality practices is a day that the hospital falls farther behind more-efficient and better-funded competitors.

To compete effectively in today’s adverse economic environment, a healthcare organization must be able to access and manage data effectively across the enterprise. Data without the ability to drive insight and action is nothing but overhead. The more efficient an organization is at leveraging data assets and using them to create an actionable strategy, the better positioned it will be to adapt swiftly to changes and prevent potential problems from escalating.

However, discovering the value hidden in an organization’s diverse and distributed data is an ongoing challenge.¹ Few organizations today are effectively leveraging the data assets captured in their information technology (IT) systems to drive improved outcomes, safer care, and bottom-line results. Healthcare leaders can no longer afford to maintain the status quo in their attempt to use the data from these systems. Even with an increasing move towards more integrated solutions, the notion that a single system or vendor offers a silver bullet solving healthcare’s data challenges is fallacious. Whether an organization has disparate systems or a more integrated approach, the reality is that the cost, time and resources required to glean intelligence are overwhelming obstacles to effective decision-making and performance improvement.

It is often said that the definition of insanity is doing the same thing and expecting a different result. It’s time for a fundamentally different approach to information management that will help organizations respond to change and traverse today’s stormy economic climate. This paper discusses the challenges facing healthcare leaders today, and outlines a strategic approach to leveraging data that can help healthcare organizations understand the past, examine the present, predict the future, and confidently act on this knowledge.

77%
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financial challenges as
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The future isn't what it used to be

In light of the trends emerging over the last few years, it's no wonder that financial challenges were ranked as a top issue for hospital CEOs. In 2008, the American College of Healthcare Executives (ACHE) reports that 77 percent of CEO respondents cited financial challenges as their top concern.²

There is great reason for this concern. Hospitals watched as their access to capital steadily decreased, with the possibility of future credit logjams on the horizon as Fitch Ratings downgraded its outlook on the U.S. not-for-profit hospital sector to negative for the first time in five years.³ Moody's Investor Services reports significant deterioration in rating activity due to soft to declining volumes as a result of patient-deferred healthcare needs, rising bad debt expense and charity care, and deteriorating liquidity and balance sheet strength from investment losses and large interest rate swap collateral postings.⁴

No margin for error

A financially healthy organization is one that produces an operating margin that allows it to obtain the capital it needs to maintain and grow its business.⁵ For hospitals, capital comes primarily from operating cash flow, debt financing and investment income.

An improvement in an organization's operating margin today yields a multiplier effect on tomorrow's available capital.⁶ However, the healthcare industry has never seen margins so low – currently more than half of U.S. hospitals report negative margins.⁷ This means that even with the government's effort to revive the stagnant credit markets and fix an ailing economy with the stimulus package, hospitals are finding it increasingly difficult to access the capital necessary to finance everything from facility upgrades to clinical and information technology improvements.⁸

Quality drives the bottom line

As reimbursement is increasingly tied to quality and performance, most providers find themselves ill-equipped to bring together the clinical and financial data necessary to manage and optimize payments based on quality and other performance measures. Efficiently amalgamating clinical and financial data is a critical success factor for hospitals to promote quality and optimize reimbursement. This includes allowing the exploration of that data in real-time to predict which patients may fall into a core measure population while they are in the hospital and appropriate action can be taken. The ability to rapidly gain the insight required to improve processes is increasingly critical to ensure maximizing reimbursement.

Consolidation can create leverage

Industry pundits predict increasing mergers and acquisitions in a wave of consolidation as lower-rated institutions suffer from reduced access to capital. Mergers can bring savings, gains in technology and more leverage with suppliers and insurance companies. However, as hospitals consolidate, management generally inherits a patchwork of fragmented technologies. This can bring in additional costs and redundancies as information technology (IT) departments struggle to maintain multiple systems and executives struggle to get a holistic, enterprise data view in order to leverage the potential gains of consolidation and achieve economies of scale.

The data gap

The healthcare industry continues to adopt information technology covering administrative, financial and clinical care processes. As a result, organizations have captured a wealth of data that can help improve productivity, efficiencies and care quality. Given this progress, one might assume that healthcare leaders, financial departments and administrative management are now in a much better position to make informed decisions with insights into reimbursements, utilization and staffing, capital management, emergency care spending and many other areas.

Yet, the unvarnished truth is that most organizations are filled with manual and/or complicated tools to view data.⁹ Ensuring that the right people are able to view and explore data to gain insight is also challenging. As organizations begin to view their data as a strategic asset, they realize that they don't have the timely, accurate and insightful information they need.

While there is much focus these days on the stimulus package funding the implementation of electronic medical records, organizations spending those dollars will still find themselves hungering for more insight about their business operations that can drive performance improvements that can lead to sustainable changes and improved financial health over the long term.

Strategies for challenging economic times

The new climate requires a tight focus on improving revenue, efficiencies and performance. Hospitals that outperform may gain competitive advantage during the downturn, and hospitals that underperform relative to their peers may continue to slide, creating a large gap between have and have not.¹⁰

The rapid seizure of the credit markets and accompanying decline in investments highlight the need moving forward for a dynamic, fluid and agile approach to both strategic planning and day-to-day operations. As the industry becomes more complex and faces more frequent, far-reaching changes, organizations that can rapidly assess and adjust their goals and market alignment will have a significant advantage over those entities that are locked into a more traditional approach.

Create an enterprise operational performance strategy

A review of high performing organizations unveils that what sets the operations of such companies apart is the way they tightly couple the process of doing work with the process of learning to do it better.¹¹

At the heart of this ability is the free flow of information to all employees at the point of impact.¹² The person who is most adept at making a decision or understanding how a process works needs real-time access to all relevant enterprise information. They also need the ability to manipulate the information to question and explore without the restraints of structured queries, the difficulty of learning multiple systems and tools or needing to go to a specialist to find the data.

Aligning IT with improvement strategies

Organizations need the ability to do more with their existing assets, leveraging the amazing amounts of data that they already own and facilitating collaboration across multiple groups and care boundaries so they can:

- **Optimize resources**, reducing the need for inflated staff dedicated to querying systems or manually pooling data.
- **Extend the value of legacy systems** and gain more flexibility in future IT investment.
- **Consolidate systems** as the industry trends toward mergers and acquisitions continue. Enterprises must consider how to bring together valuable data from diverse IT infrastructures without the high expense and risk of "ripping and replacing" systems.
- **Improve revenue cycle processes** through focused exploration of potential improvements across the entire cycle – from front-end to clinicians to back-end.

Hospital Improves Financial Operations with Amalga UIS

Washington Hospital Center, a member of MedStar Health, has received a number of benefits with Amalga UIS:

- Reduction of claims denials
- Improved accountability and collaboration
- Ability to pinpoint strategic trends
- Easier approach to operational and budgetary planning

At Washington Hospital Center, addressing claims denials requires, above all, the ability to gather and organize vast amounts of disparate data and present it to users in a timely and versatile fashion.

With Amalga UIS, staffers can consolidate and present information so that in less than 30 seconds they can determine a pattern among codes, payers, and even points of time in the billing cycle. "We can easily see which kinds of claims are being denied, which payers are denying them, and when in the billing cycle this is happening," says Bradley Kappalman, Assistant Vice President of Medicine, Washington Hospital Center.

Denials can be avoided by setting up customized views that enable reviewers to ascertain which services might be reimbursed at a lower rate, or the Medicare eligibility of a given patient. "In the past, some Medicare claims were denied or patients were billed as self-pay," Kappalman says. "Now we can easily set up a view of all patients who are 65 and older, for example, and catch potential registration errors in real time. In other words, we are monitoring front-end processes not only to resolve denials but to help line staff and managers do what's necessary to avoid the denials in the first place."

- **Achieve a holistic view** across functional departments and the enterprise to drive decision making based on reliable data and to better tie financial reimbursement to clinical quality.
- **Create a data strategy.** Taking a long-term, strategic approach to information management instead of individual, one-off projects leads to sustainable organizational performance. It is through an ongoing program of applying learning that allows healthcare workers to produce real benefits and, potentially, competitive differentiation.¹³

Microsoft Amalga Unified Intelligence System 2009: A Path to Insight

To effectively leverage data assets to improve operational performance and financial health, the healthcare industry needs a fundamentally different approach to information handling. Microsoft® Amalga™ Unified Intelligence System (UIS) 2009 is designed to address the current and future information management requirements of healthcare. Amalga UIS is built for change, reducing the complexity, effort, and resources required to deliver an agile enterprise-wide data platform that allows use and re-use of healthcare data and extends the value of existing technology solutions.

Empower people

The pace of change in healthcare requires an agile organization that has the ability to sense and respond to change.¹⁴ Retrospective reviews of data are no longer sufficient – organizations will need to obtain a unified, real-time view with the ability to add predictive modeling capabilities for key strategic areas.

For example, erroneously coding at a lower severity level can cost up to \$10 million dollars in lost revenue per year.¹⁵ Typically, documentation specialists comb the paper or electronic medical record post-discharge to find these errors. Amalga UIS can deliver a transformational approach to using data being captured across the enterprise by identifying markers for complexity that may indicate that a higher severity coding is required and applying algorithms that alert staff in real-time. This could allow a reduction in time and resources to conduct chart checks as well as additional revenue to the organization's bottom line.

The true value in Amalga UIS centers around the creation of a new capability to look at data differently, and create a learning culture that allows organizations to get ahead of the curve with the data to support, explore and understand processes that can have a substantial impact on organizational performance and financial health.

Accelerate time to value

It's increasingly important for organizations to design technology implementations with short project phases and delivery cycles to accelerate time to value, if possible, rather than wait months – or even years – for the organization to see the fruits of its investments.¹⁶ For example, revenue cycle and other financial implementations average 18 to 24 months. The intense focus on these implementations can bring other improvement efforts and projects to drive more effective data use to a standstill. Amalga UIS allows an organization to rapidly pull together data from multiple sources to gain fast ability to leverage data assets for insight and improvement, and then create new uses for that data over time. Most organizations implementing Amalga gained the ability for new insight and exploration into their data within four to six months.

“ Amalga UIS allows an organization to rapidly pull together data from multiple sources to gain fast ability to leverage data assets for insight and improvement... ”

Creating value

Amalga UIS is currently used in several different healthcare settings, for numerous use cases. Microsoft has, however, identified several key business success factors for hospitals and has evaluated how Amalga UIS can significantly impact them and contribute to an improved competitive position. For more information about Amalga UIS please visit www.microsoft.com/amalga/financial.

Creating a foundation for change

The current economic climate has fundamentally created a new world order where failure to effectively leverage data assets can result in lost opportunities and continued inefficiencies. Even more critical is for organizations to look beyond the current situation and set the stage for sustainability in the years to come.

In light of the current changes and challenges, great opportunities exist for organizations to reconsider and refocus their use of data. The data collected by IT systems can help serve as a flashlight to illuminate the best and the worst of processes and practices. This knowledge can improve care, reduce costs, and set the stage for enhanced organizational performance that can allow organizations to not only survive this downturn, but thrive.

¹ Burke, Jason, R. Ingraham. "Path to Insight: Financial departments make or break organizations. Can BI improve healthcare CFO success?" Health Management Technology. September 2008.

² "Top Issues Confronting Hospitals: 2008." American College of Healthcare Executives. <http://www.ache.org/PUBS/research/ceoissues.cfm> (accessed April 27, 2009).

³ The Impact of the Economic Crisis on Health Services for Patients and Communities. American Hospital Association. <http://www.aha.org/aha/content/2009/pdf/090311econcrisisdatbank.pdf>. (accessed April 27, 2009).

⁴ Downgrades Dominate Rating Activity for Non-Profit Hospitals: Moody's. April 22, 2009. Healthcare Financial Management Association. <http://www.hfma.org/hfmanews/permalink.guid.4d5c9fe8-01ef-40e7-b5de-26c41a4ca82d.aspx> (accessed April 27, 2009).

⁵ Health Care's Perfect Storm: Navigating in a World of Reduced Margins. February 2008. Ernst & Young. http://www.ey.com/Publication/vwLUAssets/Health_Care_s_Perfect_Storm;_Navigating_in_a_world_of_reduced_margins./FILE/Healthcare_Perfect_Storm.pdf (accessed April 27, 2009).

⁶ Health Care's Perfect Storm: Navigating in a World of Reduced Margins. February 2008. Ernst & Young. http://www.ey.com/Publication/vwLUAssets/Health_Care_s_Perfect_Storm;_Navigating_in_a_world_of_reduced_margins./FILE/Healthcare_Perfect_Storm.pdf (accessed April 27, 2009).

⁷ Downgrades Dominate Rating Activity for Non-Profit Hospitals: Moody's. April 22, 2009. Healthcare Financial Management Association. <http://www.hfma.org/hfmanews/permalink.guid.4d5c9fe8-01ef-40e7-b5de-26c41a4ca82d.aspx> (accessed April 27, 2009).

⁸ Tight Capital Access. March 2009. Trustee.

⁹ Burke, Jason, R. Ingraham. "Path to Insight: Financial departments make or break organizations. Can BI improve healthcare CFO success?" Health Management Technology. September 2008.

¹⁰ Bernet, Patrick Michael, M. Rosko, V. Valdmantis. "Hospital Efficiency and Debt." Journal of Health Care Finance. 2008;34(4):66-88.

¹¹ Spear, Steven. "Fixing Health Care from the Inside, Today." Harvard Business Review. September 1, 2005.

¹² Spear, Steven. "Fixing Health Care from the Inside, Today." Harvard Business Review. September 1, 2005.

¹³ Burke, Jason, R. Ingraham. "Path to Insight: Financial departments make or break organizations. Can BI improve healthcare CFO success?" Health Management Technology. September 2008.

¹⁴ Glaser, John. Creating IT Agility. Healthcare Financial Management. April 2008.

¹⁵ Revisiting Physician Documentation. The Advisory Board. 2006.

¹⁶ Glaser, John. Creating IT Agility. Healthcare Financial Management. April 2008.



For more information about Amalga UIS please visit
www.microsoft.com/amalga/financial

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