



## reducing The Cost Of healthcare With Technology

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This year's HiMSS conference and Expo was a great demonstration of all the technology advancements we are making in the Healthcare IT space. With over 200 talks, 1200+ exhibitors and 40,000 attendees, there were endless industry leaders to network with and a wealth of information to take in. As anyone would expect, improving healthcare outcomes and reducing the cost was a hot topic.

In the sea of vendors at the conference, there were numerous solutions including many EHR, PMS, HIE, Population Management systems and a variety of other solutions ready to address every healthcare industry need. There is no doubt that Healthcare IT is helping - and will continue to help - the industry improve patient outcomes. EMR vendors explained how their products would improve outcomes, leading to lower overall costs. PMS vendors explained how doctors or hospitals would run more efficiently and eventually become paperless. Population Management meant better care overall and reduced re-admittance to the hospital. With current healthcare spending in the USA reaching \$2.8 trillion annually, we have a ways to go, but there is no doubt that Healthcare IT can help rein in costs and deliver an ROI if it's done right.

### **A hospital case study**

There was a talk at a recent industry event by a large hospital explaining how they lowered their healthcare costs by roughly \$10M. The hospital explained how all the systems implemented at the hospital allow them to efficiently and effectively address total care management working as part of an accountable care organization (ACO). Improving patient outcomes was their primary focus, an effort which is admirable. The majority of the savings was from reducing admittance to the hospital by finding ways for the primary care physician to address the patient's needs. When you remove the healthcare hat and look at this from a pure business sense, this empties beds and creates a reduction in revenue for the hospital, not an operational cost savings.

The software and hardware systems that the hospital implemented in this scenario have an initial price tag that is no lower than \$250M, and likely in the \$300 to \$500M range. Just the EMR system implemented would likely be over \$200M in cost upfront and \$30M a year in maintenance based on knowledge of what some other hospitals have paid for similar implementations like MaineHealth's \$160M implementation of Epic or Duke University Medical Centers \$700M implementation. Those huge costs equate to a real business issue that must be addressed. When you start looking at the costs of healthcare software, the affordable care act, and the healthcare payer programs like pay for performance, capitation, and fixed budget models, you can start to see that hospitals are being put in between a rock and a hard place. They are forced to implement highly expensive software systems, and implement practices that will reduce the number of beds they are able to fill, while being held to lower payments and incentive programs that are often materializing as penalties. Hospitals

are being squeezed; higher costs and lower revenues are a recipe for disaster in any industry. Hospitals are an integral part of the healthcare system and we need to give them the right tools to run more efficiently and reduce their operational costs if we want to see a true reduction in healthcare costs long term.

### **The solution is technology**

So what is the answer? Should hospitals go the route of consolidation and downsizing? If that is what happens, we will achieve lower costs and cheap care. Healthcare is not about costs, or profits, it is about caring for people, and while technology can surely help, it will never replace the caring hands of nurses and doctors. Instead, healthcare organizations need to look at what they are spending on technology and how it can help create a better and more efficient care system now. Hospitals need to ensure they do a full evaluation of all system options before implementing a mega-million dollar system. These client server based EHR systems are yesterday's technology. As Healthcare catches up with technology trends from other industries, the SaaS (Software as a Service) model will dethrone these legacy systems in the next 5 years. When that happens, the only thing that will keep hospitals on these old technologies is that they invested so much money to install them to begin with. Web based SaaS EHR systems may not be where they need to be today to run large hospitals, but it is just a matter of time and innovation to get there. For smaller hospitals and large practices, SaaS systems may be the perfect fit today without a major outlay of capital.

Large healthcare organizations need to take the time to perform a full evaluation of the systems on the market, including some of the high quality open source systems currently available. Unfortunately, many people in Healthcare are afraid of the open source model. They assume that they will not get the type of service and guidance that can be provided by a large corporation. The fact is that there are companies that fully service these open source systems, and provide high quality service. With the hundred million dollars that a hospital could save through an open source implementation, they should be able to afford the highest level of support these companies offer. These open source EHR systems may not be better than the proprietary systems, but usability studies have shown that the system that is used by Veteran's Affairs gets just as good ratings as Epic, Cerner and the other large EHR providers.

Finally, an important step in achieving lower operational costs for hospitals while maintaining quality is to implement a system that tracks activity based costing. Today's EHR systems are not yet able to provide hospitals with the detailed breakdown of how they spend money on a daily basis. For this, the best option is to look into custom software development to consolidate data from various systems into a reporting database that tracks and provides insight into the activities tied to operational costs. This type of solution enhanced with data visualization can help highlight workflow inefficiencies in daily operations that are costing hospitals hundreds of thousands of if not millions per year.

### **About the author**

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