



Return on Investment in the Face of Enterprise Change:

Infirmary Health's Journey to EHR Optimization





Contributing Executives



Eddy Stephens
Chief Information Officer
Infirmary Health

As an information technology executive with over 35 years of experience, Eddy Stephens brings valuable insight to health information technology projects. He is responsible for leading the use of all information technology and resources within a growing network of hospitals, clinics, and healthcare-related facilities, including telecommunications and biomedical electronics. His tenure at Infirmary Health System has been one of progressively responsible management in an integrated healthcare system. His experience includes strategic planning, emerging technologies, systems life cycle management, and extensive knowledge of health care technology vendors and their roles. Mr. Stephens has a proven track record of bridging the communication gap that so often exists between information technology professionals and other professionals within the organization. Mr. Stephens is a Fellow in HIMSS, a member of CHIME and active in many civic organizations.



Vincent Lucey
Healthcare Practice Leader
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Vincent Lucey, Healthcare Practice Leader for ANCILE, is in the unique position of having worked at all four of the largest IT learning and performance software solution companies around the world, including Oracle UPK, SAP WPB, Assima, and ANCILE. With a global remit, he promotes use of the award-winning ANCILE solutions across large organizations such as Infirmary Health and Honor Health. Vincent has over 20 years of experience in learning and development in corporate settings that span oil and gas, healthcare, financial services, and technology.





Introduction

Pundits may call this the “Post-Electronic Health Record (EHR) Era”, but a more accurate—albeit clumsy—title may be the Post-Meaningful Use-EHR-Implementation Era. From a simplified perspective: having invested millions of dollars in these systems, hospitals and health systems are focused today on extracting value from EHRs even as the technology and business models that spawned them change.

Change has never been more of a factor in an industry that has never stopped changing. The convergence of cloud computing, mobile devices and consumerism with value-based, accountable care and population health—all of that in an industry consolidating so rapidly that half the number of health systems in existence today may be gone in the next five to 10 years.¹

In considering these factors, delivering upon investment has become the rallying cry of the era. In a recent PwC research report outlining expected 2016 trends in healthcare, 2016 is dubbed the year of “merger mania”—muddying and complicating what is already a difficult mission of delivering on the investment of the EHR.² Add the massive cost of the EHR, and return-on-investment becomes even more critical for provider leadership. In a 2011 study commissioned by the Agency for Healthcare Research and Quality (AHRQ), it is estimated that the cost of implementing an EHR system in a physician practice was \$32,409 per physician through the first 60 days after system launch, with an estimated cost of \$17,100 per physician annually. Similar results were reported by community-wide initiatives and systems studied in Massachusetts and New York City.³ Pair this with recent data released by the Medical Group Management Association (MGMA) that reported a 71 percent increase in health information technology (IT) costs over the past few years, and it is clear why driving adoption and return on investment for the EHR is an imperative for the modern Chief Information Officer (CIO).⁴

Still, forward-thinking healthcare CEOs call this the most exciting time of their lives due to the new opportunities for innovation in an IT-enabled, patient-centered environment focused on health and wellness. Healthcare CIOs see opportunity in innovative strategies to optimize the EHR so clinicians will adopt it and generate the value it always promised: becoming the digital engine of the Triple Aim. Hospitals and health systems aren't focused on a post-EHR era, but on an EHR-optimization era.

“EHR optimization can be defined as improving three aspects of the EHR experience,” says Luis Saldana, MD, MBA, chief medical informatics officer at Arlington, Texas-based Texas Health

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Resources. “Those aspects are effectiveness, efficiency and user experience. Back in 2005, the EHR tools were rudimentary. The intent was to get our users to adapt to significantly new workflows and tools. It was quite difficult for physicians and they did it on faith. Since then, we’ve tried to address the EHR’s shortcomings and change them from being a tool that you have to adapt, to one that helps you deliver care.”

Culture with Capital C’s: Infirmiry Health Pilots Unique Education and Training Approach to Drive User Adoption

While EHR optimization certainly involves technical enhancements, improved clinical decision support (CDS) and workflow redesign, optimization also includes continuous user education and training to encourage adoption and effective use, especially by physicians. This becomes especially true for organizations taking a best of breed approach, continuously launching new or upgraded systems to present value for their clinicians. Indeed, many CIOs and CMIOs (Chief Medical Information Officers) view education and training as the most important element in making an EHR—even an average one—a success. This is in keeping with current thinking that culture change is the most important factor in successful transformation in healthcare.

“The 5 C’s of Culture Change,” according to Jeffrey Rose, MD, senior VP of clinical strategy at Hearst Health, are comprehension (understanding the problem), compassion (spirituality and commitment), collaboration (teaming between subcultures and providers) coordination (system processes, infrastructure and ideation) and convergence (leadership of local culture with spread and dissemination of new norms in a rapid way).⁵

Education and training cut across all the elements of culture change, especially when it comes to optimizing an EHR. Nowhere is that more apparent than at Infirmiry Health, a Mobile, Alabama-based health system serving an 11-county area of south Alabama and north Escambia County in Florida, which includes: five hospitals, more than 900 physicians, two post-acute care facilities, a physician clinic network with more than 30 locations, three diagnostic centers and three urgent care clinics.

Infirmiry Health controls about a 50 percent market share in the two counties that surround historic Mobile Bay, anchored by Infirmiry’s flagship hospital, Mobile Infirmiry, a 704-bed tertiary care facility. But the health system also includes smaller community hospitals like 150-bed Thomas Hospital on the eastern shore, which it acquired in the past decade, and a 65-bed facility.

The 5 C's of Culture Change

1. Comprehension
2. Compassion
3. Collaboration
4. Coordination
5. Convergence





Eyes on the Continuum

The health system has its eyes on the continuum of care, including ownership of a long-term-care hospital and rehabilitation hospital. Optimizing its EHR through education and training is an ongoing initiative in Infirmiry Health's quest for coordinated, quality care across the continuum.

"Optimization is about having a continual dialogue with nurses and physicians," says Eddy Stephens, Vice President of IT and CIO of Infirmiry Health, a 35-year veteran of the organization who has responsibility for IT across the system, including biomedical technology and telecommunications. "They used to question the EHR. Now they say, 'Just tell me the basics and I'll run with it.'"

Stephens assembled and developed an EHR steering committee which brought together 15 to 20 doctors—surgeons, orthopedists, internists—from its two largest hospitals in monthly meetings to discuss upcoming changes and recommendations. Physicians at Thomas Hospital and other facilities can join these meetings via video conferencing. Similar monthly meetings are conducted with physicians from Infirmiry Health's clinics, which have different EHR issues.

"We're trying to engage as many doctors as possible. It helps when we can say to a physician leader, 'We're having an issue with one of your partners and need your help.' Physician-to-physician conversation helps greatly in smoothing out issues of EHR adoption. Having physician leaders is integral to driving IT adoption," he says.

Going Live Over Time

In 2008, Infirmiry Health went live with their Epic EHR platform, including documentation and order entry in all its hospitals and clinics. However, it still uses the McKesson enterprise platform for hospital billing and pharmacy. It is also about to go live with Epic's operating room (OR) management software and is replacing a legacy labor-and-delivery information system with Epic's Stork software.

Infirmiry Health's new Chief Medical Officer is an Epic veteran and can leverage his experience to help other physicians learn and adopt the system. The health system also sends clinicians to Epic Physician Builder School to become more proficient with the EHR, which undergoes continual optimization.

"In May we had a call on best-practice alerts for sepsis as part of a major proactive initiative for nursing informatics. We're always optimizing workflow for different medical specialties, whether it's pulmonology or pediatrics. General surgeons need to incorporate some personal nuance related to surgery protocols, so we work together to do that," says Stephens.

The Infirmiry Health EHR Steering Committee

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Meet monthly to discuss system updates, new initiatives, and top recommendations from field users.

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“When it’s time to add or replace, we go to Epic first,” says Stephens, noting that may require customization. For example, Infirmary Health’s in-house therapy firm offers physical, occupational and speech therapies centered around its rehab hospital. When the division required new specialized software to manage inpatient and outpatient care, it configured Epic to do the job. “We made Epic work for therapy,” he says, adding that the rehab unit still uses McKesson for financials. In the next three to five years, Infirmary Health plans to replace its financial software, including revenue cycle management systems.

Evolving the EHR—Infirmary Health’s Approach to User Adoption

Staying with a single EHR vendor like Epic means incrementally replacing heterogeneous departmental systems over time. However, as CIOs know, all EHR vendors require configuration to each particular environment and even the same Epic platform can vary from one hospital to another within the same health system.

“We had to structure Epic for pharmacy. We spent an awful lot of time arguing and looking. Our staff didn’t know what they didn’t know,” says Stephens. “A lot of doctors wanted it absolutely perfect. We’re on multiple iterations. Our CMIO is in my department and helps me deal with physician needs and also developed our internal training. We also have an IT training manager, a curriculum developer and a team of trainers. They have an office off the physicians’ parking deck that’s staffed early to late, and docs stop in all the time. It’s a continual education process.”

That need for continual education is why Infirmary Health partnered with ANCILE, a company that provides a sophisticated software platform to continuously educate clinicians and drive user adoption of IT.

“With ANCILE we’ve evolved the EHR,” says Stephens. ANCILE’s uPerform platform proved to be at the center of this evolution for Infirmary Health’s Epic EHR. uPerform helps organizations easily create learning content, and deliver that content when it is most needed and most effective – right at the moment of need. ANCILE’s advanced platform guides users intuitively and visually in how a system works and can be used in a production environment. “Once they get used to it,” says Stephens, “you can say, ‘Let me show you how to complete this process in one click instead of three clicks.’” Through uPerform’s platform functionality, Infirmary Health was able to create and support their online educational approach to improve the management and adoption of systems—accelerating IT’s ability to launch new systems and workflows into the field, effectively evolving the EHR.

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Managing Enterprise-Level Change

Enterprise-level change events, such as mergers or taking on new hospitals within the health system, present the need for interventions to drive user adoption. In June 2015, Infirmiry Health took over management of Atmore Community Hospital, which required a full-scale change of everything IT within the building, even down to printer contracts. The transformation went smoothly both inside IT and out. The most recent management event was consolidation of radiology offices in a new 10,000-square-foot imaging center, a financial success in large part because of user training for a new Epic radiology information system (RIS) that replaced an aging Phillips RIS.

Optimization of the RIS was required to drive user adoption, in part because the two previous radiologist offices used completely different physician order sets. “Our approach was to use the ANCILE uPerform product and set it up like a university,” says Stephens. “It went beyond the generic education modules from the EHR vendor. “

ANCILE uses a “Show Me-Guide Me-Test Me” model. “Doctors really don’t like to come into a classroom cold,” emphasizes Stephens, who lauded uPerform’s simplicity, user-friendliness, and flexibility to make critical resources available to physicians before or after training courses. By presenting a variety of resources in an engaging, hands-on format, Stephens and his team massively expedited speed-to-value for their new RIS system investment through Epic.

That 2015 go-live enabled Stephens and his group to innovate further with building out educational tools. “We tried to say, ‘This is how we use the system everywhere else,’ and used that model to expand the offerings and make it part of bringing on new partners or facilities. “The model really sped up our speed to value.” What once started as a two-person education team is now a fully staffed department, collaborating with IT and experts from specialty departments to continue developing new eLearning modules.

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Optimization 101

Optimization ultimately involves the people side of the IT triad in the form of strategic use of education and training—cutting across all levels of Infirmiry Health IT, not just apps.

Epic provides a foundation for building best practices using national organizations such as the American College of Surgeons. It's the job of Infirmiry Health's CMIO to establish such protocols and get them vetted in the committee process. Ultimately, it is this collaboration of physicians, education experts, media personnel, and the IT team that furthers user adoption of Epic, and drives return-on-investment for the ever-evolving EHR optimization process.

A 40-to-50 bed hospital with tremendous outpatient volume operates differently than a 714-bed tertiary-care hospital. "Fortunately, we had a 64-bed facility as a model and had the capability of education with online learning," said Stephens. "We developed 100-level and 200-level courses, and if people wanted more we offered 300 and 400-level courses. In no more than 15 or 20 minutes, a physician could learn how to enter an order into the system, and if needing a refresher, could go back and use a reference later." The "Infirmiry Health University", iLearn, had been born.

ANCILE provided assistance in setting up the software first and then gradually turned control over to Infirmiry Health. "I had customer service people working with doctors, then we expanded that to include a head trainer, then we added a curriculum director," he says. Over time the delivery mechanism expanded beyond online content to hand-outs, tip sheets and other resources.

Vincent Lucey, Healthcare Practice Leader for ANCILE, who guided Infirmiry Health in its implementation of the user-adoption software platform, says a key benefit of such a system is the ability to support rapid content development on the web or a Windows-based system. "You can rapidly develop a variety of educational content formats by taking advantage of uPerform's single-source, mobile enabled files (XML-based) – a format that allows learning developers to capture steps in a task and produce one file that can be published to multiple outputs. This flexibility for both creation and maintenance is critical for a diverse and dynamic computing environment like healthcare."

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—Eddy Stephens



Simulation of the EHR: A Continuous Educational Resource

Infirmary Health's iLearn portal features connected eLearning courses that allow for simulations of the Epic EHR and workflow to mimic real-world scenarios in a guided sandbox environment. uPerform's platform flexibility also allows users to learn at their own pace by making a variety of courses available to Infirmary Health staff to guide their own path to their "EHR diploma". A built-in remediation application within the platform, enables physicians to revisit certain courses and fill in knowledge gaps using a variety of different learning formats and files (including video, HTML, PowerPoint, etc.). A resounding benefit for the Infirmary Health team was the ability of uPerform to provide, in a single-point offering, the ability to produce documentation, simulations, elearning, quizzes, and online help.

Lucey reiterates this, expanding on the need for flexibility in the healthcare field as policies can change overnight. "In the long run, processes change quickly and sometimes dramatically—especially on the regulatory side. Infirmary Health can make changes or add content in a matter of seconds," says Lucey. "User adoption isn't a one-time thing. What is considered optimized today may not be 6 months or a year later. It is a continuous changing process that is always building, always improving."

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Conclusion: Driving and Simplifying Physician Adoption

Ancile provided a significant benefit when it came to implementing computerized physician order entry (CPOE) and documentation simultaneously, neither of which the health system had experience with and for which it was unable to offer classroom or one-to-one training. "We wouldn't have been able to validate compliance with physicians at our flagship hospital without the 100, 200, 300 and 400 training course levels we created with ANCILE uPerform," says Stephens. As physicians were trained, the health system was also able to continually refine the courses to make them even more effective.

"Ancile has provided a tremendous benefit. Using their system was a major factor in gaining physician adoption of the EHR. With Ancile as a partner, the process has been particularly successful," he says.



Stephens says lessons learned included:

Clinician Collaboration Needed: “We’re IT people so we have to listen to doctors and other clinicians. As my CEO says, ‘I can’t run a hospital without doctors.’ We have to work to make sure we’re meeting their needs.”

Adopting a Kaizen Approach: “What is optimization today may not be optimization six months from now. It’s a continual process. It’s the gift that keeps on giving. You’ll always be changing upgrades or doctors, so you’ll always be tweaking and perfecting adoption.”

When you Fall. Fall Forward: “No matter what you do, you have to be nimble. Somebody is always going to be unhappy, and you revisit those situations as needed, but continuous forward progress is critical.”

Be Flexible: “CIOs should not be hard-headed or committed to a specific IT perspective or way of doing things. The technology should always be an aid to clinical workflow, not an impediment—so always be open to change.”

Lessons learned



Clinician collaboration needed



Adopting a Kaizen approach



When you fall, fall forward



Be flexible

Driving adoption of IT systems and applications is critical in all industries, but in a highly complex industry like healthcare that is undergoing transformation en masse, user adoption is critical to survival. Optimizing the EHR for physician adoption is central to this process, involving the same level of software sophistication for training and education that physicians are using to care for patients. Such IT-enabled change is key to the larger cultural change required for moving from a traditional hospital-centric environment to the patient-centered, accountable care, and population health models of the future.



About ANCILE

ANCILE offers best-in-class software that drives user adoption on over 100 of the world's leading business applications. Used by over 4,400 global customers, including half of the elite Fortune 100, ANCILE helps customer organizations realize the full value of their mission-critical business applications and transformations by increasing employee understanding, proficiency, and adoption. Their products, including those of its partners, support on-boarding, employee performance, continuous learning, process compliance, change management, sales process alignment, and more.

ANCILE created the learning and performance software category more than a decade ago. ANCILE was the first to deliver employee-specific content based upon an employee's language, location, or role – all from a single content source. And, they were the first to combine context-sensitive help, authoring, publishing, content management, performance support, and collaboration all on one platform.

uPerform

uPerform is the core of the user adoption platform solution from ANCILE. mPerform delivers targeted, high-quality learning content to employees. Anyone can easily author, edit, and publish task-based documents and simulations, and eLearning courses. uPerform also enables organizations to send content to the entire workforce via the web, and puts knowledge sharing and personalized, context-sensitive help in the users' hands.

Learn more about how uPerform is driving user adoption.

Visit: **ANCILE.com**

OptimizeHealthIT.com



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