

Completing the EMR Puzzle:
A Blueprint for Success

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Executive Summary

During a January 2009 speech in Fairfax, Virginia, President Barack Obama stated his desire for all hospitals and physicians' networks to have switched from paper-based charts to electronic health records (EHR) within five years. "This will cut waste, eliminate red tape and reduce the need to repeat expensive medical tests," he said.

John Castellani, CEO of Business Roundtable, predicts the plan will create up to 200,000 jobs for the project planning, implementation and management of EHR systems. The EHR scheme is part of a nationwide initiative to eliminate time and cost inefficiency in U.S. healthcare, to improve care to patients and to enhance the portability and accessibility of health records.

In his inaugural address on January 20, President Obama reiterated that increased investment in EHRs and associated technology was important to his administration. He included healthcare IT in his top five domestic plans, and vowed to "wield technology's wonders to raise healthcare's quality and lower its cost."

The U.S. Government's 2010 budget includes a 10-year \$634 billion reserve fund for healthcare reforms, which will likely provide hospitals with additional financing for their EHR projects. Healthcare IT News quoted Justin Barnes, chairman of the Electronic Health Records Association, as saying, "This is a tremendous advancement for health IT and EHR adoption in America." In a press conference, President and CEO of HIMSS Stephen Lieber added, "The state of the economy and the healthcare system warrant a significant investment in health IT, especially in light of President Obama's calls to computerize all health records within five years."

This whitepaper will propose a roadmap for hospitals to successfully deploy a cohesive electronic medical record (EMR) system, as part of the broader EHR initiative. First, it is necessary to explain the distinction between EMR, EHR and LHR – terms which are sometimes mistakenly used interchangeably. For the purposes of this paper:

Electronic Medical Record (EMR) encompasses the medical history – tests, diagnoses, treatments and other elements – of a single patient specific to a particular facility. The record is owned by the provider. EMRs

may be used to achieve a more efficient exchange of information within the facility and to guide clinical decision-making. Likewise, an EMR system describes the local provider's computerized environment that makes these records possible.

Electronic Health Record (EHR) ideally includes a patient's complete medical history, spanning multiple providers and geographies. A comprehensive EHR requires compilation of data from various EMRs. In the case of personal health records such as those provided by Microsoft HealthVault® or MyHealthRecord®, and Google Health®, the patient owns the record, but most EHRs are owned by a facility, insurance company or insurance consortium. The EHR is the type of record proposed to reside on a shared National Health Information Network.

Legal Health Record (LHR) is similar to an EMR in that it comprises a patient's information from a single care provider, but carries with it a more binding and unalterable structure. According to the American Health Information Management Association (AHIMA), the LHR serves as the hospital's permanent business record and would be released upon request if the appropriate patient consent was on file.

As these definitions imply, the EMR is a vital component of the nationwide EHR network envisioned by the Obama administration, the initial provisions and funding for which are included in the 2009 Health Information Technology for Economic and Clinical Health Act (HITECH). Under the terms of this new legislation, more than \$18 billion will be made available to healthcare facilities demonstrating commitment to implementing EHR systems, which includes the components of EMR. Individual hospitals that meet the EHR requirements could receive more than \$2 million each in funding.

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According to a February 2009 story by Lucas Mearian in Computer World magazine, David Brailer, the first health information czar said, “A fully functioning national electronic health system could decrease U.S. health care costs between \$200 billion and \$300 billion annually by cutting down on duplicate records, reducing record-keeping errors, avoiding fraudulent claims and better coordinating health care among providers.”

The benefits of deploying a complete EMR system as part of the EHR initiative Brailer described are numerous, and include:

Timelier and more accurate treatment: Rapid access to patient charts from any location enables caregivers to make faster, more informed decisions that have a positive impact on patient wellbeing.

Enhanced patient safety: EMR technologies such as barcoding, bedside medication verification (BMV) and radio frequency identification (RFID) ensure positive patient identification and minimize the potential for errors that can jeopardize patient health and lead to legal issues for hospitals.

Reduced costs: Forms and document automation systems help facilities move toward a paperless environment, which eliminates the storage, supply and delivery overhead related to managing paper-based health records.

Increased efficiency: EMR systems reduce the tedious and error-prone manual tasks related to processing paperwork. This enables personnel to focus on patient care and other meaningful tasks, and often facilitates resource reallocation to key areas of the facility.

Improved information sharing: With a full EMR system in place, departments such as patient admissions, HIM, clinical floors and patient finance can share information in real time, speeding patient-focused, administrative and revenue cycle processes. This helps hospitals meet goal two of the Joint Commission’s 2009 Patient Safety Goals: “Improve effectiveness of communication among caregivers.” For more on the Joint Commission’s goals, go to www.jointcommission.org.

More patient involvement: With EMR, patients can more readily access their records and correct errors and outdated information, in keeping with the Joint Commission’s goal 15: “Encourage patients’ active involvement in their own care as a patient safety strategy.”

President Obama has stipulated the need for rapid action to reform the healthcare system, and this edict requires providers to determine who this affects, what the White House’s goals are, and what should be done to meet them. First, it is clear that this new healthcare plan impacts everyone – providers, insurance companies, IT vendors, healthcare staff and most importantly, patients. The primary goal of President Obama’s healthcare initiative is improving the quality of care for U.S. residents, and making this care accessible and affordable. One way to achieve these aims is to encourage providers to adopt the EHR and EMR.

The advantages of a correctly deployed EMR are undeniable, but analyzing business processes to identify EMR needs and selecting, implementing and expanding the myriad solutions required for a complete EMR system – including forms automation, document management, PACS and BMV – is a headache for hospitals. This is because of the extended time and financial investment involved, and the need to remain focused on delivering quality care. There are an increasing number of technology vendors, information sources and other confusing factors for healthcare IT professionals to consider before progressing down the EMR road.

Another complicating factor is that it is unclear how the HITECH Act will be implemented, and which EMR systems will be certified by existing or new standards as complying with the provisions of this legislation. It also remains to be seen what interoperability recommendations the HIT Standards Committee (a group of leading healthcare consultants, professionals and



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analysts) will submit to the U.S. Department of Health and Human Services (HHS).

However, this does not mean that facilities wishing to act on EMR should hold back. Systems that are flexible enough to be used across the healthcare enterprise, are interoperable, and help hospitals deliver high quality, affordable care through streamlining and automation will be as impactful within future HHS guidelines and mandates as they are today.

This whitepaper will serve as a guide to the concepts and steps involved in successfully implementing an EMR system that can help your facility meet the healthcare IT goals of the Obama administration, and the needs of your staff and patients. It also covers the selection and deployment of forms and workflow automation within the EMR initiative.

Stages of EMR Adoption: The HIMSS Analytics Model

While they recognize the advantages of EMR, many hospital administrators do not know how to obtain them. Whether a facility is just starting to plan for an EMR system, has implemented a few key technologies or is trying to optimize an existing project, there are numerous budgetary, staff-related and time-sensitive challenges to overcome.

The most insightful guide to evaluating hospitals' EMR progress is the EMR Adoption Model produced by the HIMSS (Healthcare Information and Management Systems Society) Analytics. Using this eight stage model (with stage 0 representing no EMR capabilities and stage 7 indicating full EMR adoption across the facility), hospitals can get a score that indicates how developed their EMR projects are.

HIMSS Analytics indicates that facilities will want to target completion of a stage in sequence before moving onto the next stage. However, with each health system having unique needs and resources, sometimes such a linear path is not ideal. While a certain facility would need to complete stages 0 through 3 to receive HIMSS recognition of being at stage 3, staffing and budget limitations may mean that this hospital completes stages 0, 1 and 3, and then 'goes back' to complete stage 2 when the correct resources are in place. This is a perfectly acceptable method that still uses the HIMSS Analytics guidelines as a solid basis for action.

Administrators often find it challenging to determine the methodology that best fits the needs of their health system while still providing the utmost quality of care. As a result, there isn't just a single clear path. However, the HIMSS EMR Adoption Model is an instructive road map that encourages operational effectiveness at each level. It enables organizations to leverage where they stand and to clearly determine strengths and weaknesses before proceeding further with EMR.

"Working with experienced healthcare IT vendors can help facilities to gain maximum benefits and return on investment from a process-focused approach, regardless of their standing within the HIMSS Analytics model they find themselves at," says Nani Sadowski-Alvarez, senior management consultant with CSC's Global Healthcare Group.

Below are paraphrased definitions of stages 0 to 7, along with the percentages of facilities that HIMSS Analytics found to be at each stage at the end of 2008:

STAGE 0: facilities have not deployed any EMR system in the three main ancillary departments, which HIMSS analytics identifies as radiology, laboratories and the pharmacy. Facilities at this level: 15.6%

STAGE 1: facilities have some EMR capabilities in these ancillary departments. Facilities at this level: 11.5%

STAGE 2: facilities have a clinical data repository, controlled medical vocabulary and clinical decision support system (CDSS) in place. Facilities at this level: 31.4%

STAGE 3: facilities have clinical documentation, CDSS for error checking and PACS open to users in areas other than just radiology. Facilities at this level: 35.7%

STAGE 4: facilities have CPOE and CDSS for clinical protocols. Facilities at this level: 2.5%

STAGE 5: facilities have closed loop medication administration. Facilities at this level: 2.5%

STAGE 6: facilities have full physician documentation, full CDSS for variance and compliance and full PACS. Facilities at this level: 0.5%

STAGE 7: facilities have a fully functional EMR, and the EMR can form part of an EHR. Facilities at this level: 0.3%

For more information on the HIMSS Analytics EMR Adoption Model, visit http://www.himssanalytics.org/hc_providers/emr_adoption.asp

Completing the EMR Puzzle with Forms Automation

For many hospitals, the puzzle piece of stage 2 is easily overlooked. However, forms automation, scanning barcoded forms and the porting of forms directly into document management and imaging systems is an important part of a successful EMR project.

Providence Holy Family Hospital, a leading acute care facility in Spokane, Washington, uses an Access solution to electronically manage forms in the surgery, emergency and outpatient procedure departments and in the pharmacy.

“Forms automation is helpful for any hospital that is moving toward electronic records yet still dealing with paperwork,” says Jean Carman, RHIA, HIM director at Providence Holy Family Hospital, a leading acute care provider in Spokane, Washington, whose IT solutions are managed by Inland Northwest Health Services (INHS). “Hospitals like ours find that switching to electronic forms is an important step in transitioning to a complete EMR.”

Stage 2 of the HIMSS EMR Adoption Model includes the necessity to get paper and electronic forms into the document management system, and thus into the EMR. Below is a sequential, three-step methodology for using a forms automation product such as Patient Flow System (PFS) from Access to efficiently and cost-effectively achieve this. A secondary goal is to ensure that all forms accessible as parts of the EMR are presented in a manner that is consistent and familiar to staff members, to ensure maximum usability.

In this example, we explore automated forms utilization in the patient registration department. Such technology is also applicable throughout the hospital, from HIM to clinical floors to the back office.

1) Barcoding forms: There is a widely available technology that enables hospitals to link versatile forms and document management systems, while reducing manual tasks for staff members: barcoding. During a typical patient admissions process, a registrar retrieves a stack of paper forms. Once the patient has filled in and signed these by hand, the registrar makes copies and sends forms to the medical records department for archival. Forms are also sent to clinical floors. If a document management system is in use, forms must be scanned and then manually indexed to tie them to the patient’s HIS record.

With PFS and similar systems, this inefficient process is simplified and expedited. The registrar will now print forms on demand, with barcodes automatically affixed. These forms are sent to the medical records area as before, but with no photocopying needed. Instead of performing time-consuming and error-prone manual data entry for each patient’s forms, a medical records associate can now simply scan the forms. The document management system’s OCR technology uses the barcodes on the forms to automatically tie them to the patient records.

“We are using Access’s e-Forms Repository to help prepare the paper chart components with barcodes so that they can be imported and automatically indexed in our document management system,” Carman says. “We didn’t have the manpower to scan and index these charts, and the Access solution helps us sidestep these manual tasks.”

2) Porting documents directly into the document management system: A further process improvement can be made by combining an electronic signature product such as Access’s e-Signature and a forms management module that can port forms directly to the document management system, such as Access’s Image Portal.

With e-Signature and similar products, patients electronically sign digital versions of forms. Once signed, the forms are routed to the Image Portal and converted to the preferred image format. Image Portal then sends the forms to the document management system. The forms are processed by the hospital’s document management software and automatically indexed for online retrieval by authorized users anywhere in the facility.

This technology enables hospitals to eliminate the manual delivery of paper forms between the patient registration, medical records and clinical

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floors, which carries the risk of forms being misplaced and is a time drain for staff members. In addition to saving time for staff in patient registration and medical records, porting forms directly from the forms automation application to the document management system eliminates the mistakes associated with manual data entry. A further benefit is the reduction in paper use facilitated by the implementation of a truly paperless admissions process.

“Access’s Image Portal solution has become a valuable component of our health information management process,” says Ed Fisher, CIO and VP at Norman Regional Health System, the leading healthcare organization in south central Oklahoma. “Simply put, the Image Portal makes us more efficient. It allows our resources to spend less time managing paper, and more time putting that information to good use for the benefit of our patients.”

3) Using tablet PC technology in conjunction with forms management: The next step involves using a tablet PC or similar device and its electronic charting software in conjunction with the forms management system, with the goal of offering physicians and other staff maximum flexibility while further eliminating the inefficiencies of paperwork.

Access’s Logical Ink is one such electronic charting solution that gives healthcare practitioners the simple familiarity of writing on a clipboard, while eliminating the drawbacks of a paper-based system such as redundant data entry and illegible handwriting. Logical Ink allows users to complete forms via a pen/paper interface on a tablet PC, and then converts the handwriting to digital text that can be indexed into any open database.

When a patient completes a signature in Logical Ink, the signature is encrypted into a secure electronic document, which is incorporated into his or her electronic medical record (EMR). Using Logical Ink offers the benefits of reducing the financial and environmental costs of paperwork, increased productivity due to elimination of manual tasks, enhanced data security and increased data accuracy.

Forms automation does not work in isolation, but rather complements existing and future components of the EMR

system. The impetus to adopt such EMR systems often comes from wider technology initiatives of each healthcare facility.

“Almost all IT projects are the result of a healthcare organization reaching a tipping point that forces action – whether it’s needing to address patient safety concerns, ever-increasing costs, disaster planning or another pressing concern,” says Sadowski-Alvarez. “Regardless of what issue is driving the EMR project, making a long-term investment in EMR will form a solid bedrock for the future of your facility.”

Your clinical and administrative staff members and the patients they serve are the ultimate beneficiaries of a shared commitment to replacing the inefficiency of paper-based processes with the myriad advantages of EMR (described in the Executive Summary of this paper). Deploying EMR will help your facility work effectively with other healthcare organizations to provide the interconnected, collaborative and cost-effective nationwide healthcare system President Obama envisages.

By creating a partnership with industry-leading vendors such as Access, these large and sometimes daunting goals become viable and realistic. Implementing a flexible and adaptable forms automation product such as Access’s PFS can help your organization:

Bridge the gap between the EMR, EHR and LHR: An electronic forms server can sit between the EMR and EHR to normalize and standardize the presentation of data from disparate EMR systems, with the purpose of ensuring information is accessible and consistent in the EHR. The forms server can also sit on the back end of the EHR to generate the LHR, again in a way that makes information simple to find and understand for authorized users.

Ensure positive patient identification: Upon registration, barcodes are affixed on

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patients' forms and wristbands, allowing staff to correctly identify them throughout their visits. Using a barcoding solution allows hospitals to avoid the harm to patients and legal action that can result from incorrect patient identification. This is in keeping with the first goal in Joint Commission's 2009 National Patient Safety Goals report: "Improve the accuracy of patient identification."

"With patient safety being a major concern, we recognized how barcode technologies have the ability to improve the accuracy of patient identification," says Debbie Cancilla, CIO at Erie County Medical Center, which uses Access's PFS.

The Access Patient Label and Reporting System can also enhance existing BMV and electronic medication administration (eMAR) systems by outputting barcoded medication labels helping hospitals avoid potentially fatal dispensing errors. This application can also capture report data streams from the BMV or eMAR system, automatically add headers and footers and present fluctuating data in a consistent and easy to understand format. Deploying such technology helps facilities meet goal eight of the Joint Commission's 2009 Patient Safety Goals: "Accurately and completely reconcile medications across a continuum of care."

Improve patient care: With a forms automation product in place, patient registration at the hospital front desk, in the ED and in other departments is faster, as forms packets are printed on demand. Once a patient is admitted, nurses and other clinical staff can access and print the individual's forms from the floor, instead of waiting for the delivery of paperwork.

"In the ED, the Access system gets patients registered and into examination rooms quickly, so they can be evaluated by physicians and can get the care they need without delay," says Travis Hanson, applications analyst at Anderson Hospital in Illinois.

Forms automation systems such as Access's PFS also help facilities improve care quality on clinical floors.

"Access products are improving patient safety as part of our barcoding solution, by ensuring positive patient

identification every time," Fisher says. "Quality of care has also improved because nurses use the barcodes for bedside collection of vital signs, specimen collection and to make sure that all orders for the patient have been placed."

Minimize paper-related overhead: Whether using a third party forms vendor or an in-house print shop, relying on paper-based forms is expensive. Forms automation products enable hospitals to eliminate the costs of printing, delivering, storing and disposing of forms, and liberate form storage areas. With Access's PFS, Norman Regional Health System achieved a first-year cost savings of \$380,000, Providence Hospital (serving Alabama and Mississippi) saved \$124,300 in 12 months and Mercy Regional Health System reduced forms-related costs by 44 percent and avoided spending \$24,000 on new stamp plate machines in the admissions department.

Boost staff productivity: Staff members at most hospitals spend hours searching for, retrieving, photocopying and archiving forms. Add in tasks such as manual data entry and delivering forms between departments and you have a real time drain. Forms automation eliminates these tasks, enabling staff to spend more time focusing on meeting patients' needs.

"The elegance of the Access system is its simplicity," says Andy Franz, application analyst at Yakima Valley Memorial Hospital in Washington State. "It allows our people to do the same jobs they were doing before, but in far fewer steps."

Extend return on investment from other IT purchases: A truly interoperable forms automation suite helps hospitals get more from existing technology investments. For example, a system could port forms directly to the document management system, and provide business continuity during HIS downtime.



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“Access was one of the companies that could meet our organization’s current need of barcoding for BMV, improving forms management and helping streamline processes within the organization,” says Mary Ann Schwabenbauer, CIO at Elk Regional Health System, a not-for-profit provider in Pennsylvania. “The fact that Access products are compatible with Meditech made the decision easier.”

Support the disaster recovery plan: Paper forms are vulnerable during a flood or other natural disaster. Some hospitals choose a forms automation system with a backup server to offer peace of mind and uninterrupted forms access in the event of such an incident.

When the Cedar River and Iowa River burst their banks and flooded Cedar Rapids, Iowa, in June 2008, the basement at Mercy Medical Center was partially submerged. As a result, the facility lost a large quantity of forms and paper stock. Administrators realized they needed to manage forms in a secure electronic environment, and turned to Access. “With Access’s e-Forms Repository we feel confident that if there was another flood we’d have continuous forms access,” says Vicki Wittmer, systems analyst at Mercy Medical Center. “Access’s PFS suite is a vital part of our disaster plan.”

Bolster a green initiative: The average hospital uses 10 to 20 million pieces of paper every year – the equivalent of 1,800 trees. Forms automation solutions minimize this impact by reducing paper output and duplication and eradicating the need to dispose of outdated and/or duplicate paper forms. By replacing paper-based forms processes with Access’s PFS, Hays Medical Center, a tertiary care facility in Kansas, is saving more than 127,000 pieces of paper just in the patient registration department.



An EMR Roadmap



The EMR Adoption Model from HIMSS Analytics enables facilities to tell where they are on the road to full EMR deployment, and provides invaluable information on the timing and details of introducing EMR to various hospital departments. Now that we've outlined this model and explored how forms automation fits in it, let's move onto a chronological series of steps and concepts that will help your facility successfully manage its EMR project.

It is worth noting that this roadmap is intended to be used as a guide that can be tweaked and fine tuned to meet your organization's unique needs and goals:

1) Perform a gap analysis: To examine current processes relating to medical records, identify technology and staffing needs and determine initial steps in the EMR initiative, a gap analysis should be conducted. If there are insufficient internal resources to do this, a consultancy can perform the analysis and provide the feedback needed to formulate a focused, standardized and cohesive EMR plan.

2) Evaluate processes: Before delving into the crowded healthcare IT marketplace to assess products, your organization should first perform a process evaluation for each key workflow that will be streamlined by implementing EMR solutions. This will help you to decide which processes to change, which to automate and which to leave as is. You can then find products to meet these requirements.

3) Get a competent and experienced project team in place: Once resource gaps have been filled, setting up a steering committee for the EMR project is essential. In addition to including IS/IT project managers, support staff and implementation specialists, this group should include the CIO and representatives from each clinical department that the EMR system will be deployed in. Putting together such a team ensures that the gap analysis and process evaluation are correctly applied to the facility, the unique goals and challenges of EMR deployment in each area are laid out and a realistic project timeline is established.

4) Decide how EMR will fit into key initiatives: To make every stage of the EMR project purposeful, your cross-department team must determine how the plan will fit in with other initiatives such as improving patient safety and satisfaction, supporting regulatory compliance and disaster recovery/business continuity, and expediting the revenue cycle. Prioritizing these will help you choose which types of EMR systems to deploy and when.

5) Analyze EMR vendors and their technology:

A) Choose vendors who can prove the effectiveness of their products, services and support: Any vendor worth considering will be able to put you in touch with multiple customers who have implemented its technology in the ways you are hoping to,



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and site visits can usually be arranged so you can see EMR solutions in action. Be sure to ask any peers you speak to about the quality and timeliness of vendors' project planning, implementation and support, as these are as important in determining the success of your EMR project as the products you select.

B) Take return on investment into account: To effectively evaluate competing EMR products, your facility must perform a cost/benefit analysis. On the cost side, this will assess the sticker price, annual service/support agreement, staff salaries and expansion costs. The benefit evaluation will include direct cost savings, such as personnel reassignment and reduced storage and supply overhead, and indirect benefits such as improved patient care and staff productivity.

Analyzing your organization's current processes to discover potential cost savings that could be created by EMR is a necessary preliminary measure. Then choosing vendors with a proven methodology and solid products that can be validated by numerous customer references will help ensure that the financial and time investments your facility makes in EMR will be rewarded.

However, your team should realize that return on investment numbers are merely a projection, and will be impacted by many variants, including your facility's unique goals, the quality of your project planning and ability to execute the EMR strategy, and user adoption of the new systems.

C) Select software and hardware that is interoperable and effective facility-wide:

Deploying a complete EMR system involves the use of multiple IT products. The effectiveness of these solutions and the overall initiative will be limited if the applications and hardware chosen are unable to complement each other. During the selection process, ask vendors to show real-life examples of how their products work in tandem with the other EMR components you are considering.

Products that are compatible with industry standards such as HL7 and can work in conjunction with online

personal health records systems (such as Microsoft HealthVault® and Google Health®) are preferable. Choosing interoperable technology that organizes data in a familiar and consistent manner will enable your facility to get the most from each system, and to achieve a rapid return on investment.

D) Choose EMR components that are easy to use and administrate: One of the biggest challenges when switching from paper-based medical records to EMR is getting staff up and running with new technology quickly. They are likely to be apprehensive to give up the methods they have used for years, and the best way to overcome this is to pick EMR applications that have intuitive user interfaces and functionality. It is also crucial to select low-maintenance products, to minimize the lifetime cost of owning the new technology low and to ensure that IT/IS staff don't spend hours each week fixing your EMR system. Dubuis Health System has achieved significant time savings that contributed to a rapid return on its investment in Access's PFS. "The Access suite saves us \$79,410 annually by minimizing forms management costs," says Cheryl Davis, IT director at Dubuis. "The system paid for itself in just nine months."

E) Consider your green plan: EMR products such as forms automation and document management systems can help your facility reduce its environmental impact, by minimizing the use of paper and associated supplies such as medical records folders, reducing paper and office supply deliveries and document transportation between facilities, limiting disposal of paper and printer supplies and more. Ask vendors how their products will contribute to the



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success of your green initiative.

6) Plan a phased implementation: Deploying EMR systems in every department simultaneously is a bad idea, as quality control will inevitably slip. Instead, either pick one department that is not business-critical to test your EMR applications in, or a few areas that work closely. This will enable you to make sure that every detail is taken care of, allow your team to develop a productive working relationship with your vendors and facilitate a useful trial and error approach that can be applied later as you expand the EMR initiative.

Regardless of where your team is in the deployment process, it is important to remain flexible: the most effective EMR projects are those that are adaptable to the ever-changing needs of the healthcare industry and its employees and patients. Another key is maintaining transparency to all areas within the organization. This ensures widespread support of the plan, fosters communication and prevents the creation of barriers between departments.

7) Incorporate a user training initiative: Vendors may offer off-site training, on-site programs or a combination of both. Many have a 'train the trainer' approach, whereby a few key users attend off-site training, and then use what they've learned to educate colleagues. They may also encourage a participatory deployment that equips your project managers with important practical knowledge.

Once deployment is under way, healthcare facilities often utilize secure wikis and/or kiosks that enable staff members to learn more about and interface with EMR system functionality, and to explore the impact of the newly implemented system components.

8) Groom a team of champions: For a successful EMR transition you'll need at least one firm advocate for the new technology in each department. This should be someone who has an experienced employee who has the trust of their colleagues. If you adequately train this person on using the EMR systems and make the benefits clear to them, they will sell it to their coworkers.

9) Conduct post-installation assessments: Once your EMR systems have been up and running for several

months, it's time to ask vendors to analyze how you're using their products and what you can do to get more from your EMR technology. Proactive vendors will have such an analysis scheduled, but for others you may have to contact them. In addition to regular assessments of your EMR applications, ask your vendors to keep you up to date on new product offerings that can benefit your facility.

10) Regularly survey your staff members and act on their feedback: Rapid user adoption is required to achieve full ROI. Checking with department managers to see what is working and what isn't will help you refine implementation, training and expansion strategies, and enable the IT/IS team to prioritize issues. You can enable employees to post recommendations, and offer monthly awards for the best input. Following up on suggestions, incorporating pertinent requests into future plans and ensuring transparency facility-wide will give staff members a sense of ownership. Another way to encourage participation is holding lunch and learn events and breakouts that include Q&A sessions.

With benefits including time and cost savings, enhanced patient care, safety, and satisfaction, and an unprecedented commitment from the White House to healthcare IT, there has never been a better time for hospitals to progress with their EMR initiatives.

The first essential step is assessment and planning, which includes creating a solid strategy



Conclusion

with measurable goals and achievable milestones. A gap analysis by qualified internal personnel or third-party consultants can help your facility discover where you are on the road to a complete EMR, and what staff and technology you need to move all the way to stage 7 of the HIMSS Analytics EMR Adoption Model. You should assemble a group that brings together the IS/IT team, organizational leaders such as the CIO and representatives from each department that EMR will touch.

The panel can then assess the recommendations of the gap analysis and decide on an appropriate strategy and timeline for EMR deployment. Each member of the team can share information with their teams, helping to ensure transparency and buy in for the EMR project across the organization. This plan often includes adding staff members who are qualified to manage new EMR applications.

The next step is to analyze vendors and their technology. Selection criteria for products should not only include functionality, but also interoperability with other EMR applications, scalability and ease of use. Look for vendors who back up their claims with numerous references and ROI examples and can show the effectiveness of their project planning, implementation methodology and customer support system. Each facility's EMR approach will be different, so vendors must be able to demonstrate that their products and methodologies are flexible and adaptable.

Once solutions and vendors have been selected, setting up a phased deployment that prioritizes departments and connects areas that work closely together is recommended. This enables your team to focus on one or a small number of departments at a time and to learn valuable lessons that can be applied when rolling out EMR to other departments. Choosing an area for testing new EMR systems is one way that hospitals prepare for a step-by-step rollout, and a plan for training users is also a tried and tested tactic.

As soon as several departments are up and running, internal assessments and those conducted with the help of your EMR vendors will help to overcome challenges, and decide how complementary technology can be better used to accomplish the goals of the EMR project. This will help you achieve more in both the departments that are using EMR

applications and those that are yet to 'go live.'

When evaluating EMR strategy, your facility would benefit from considering the use of an automated forms solution, like PFS from Access. Such technology can speed key processes such as patient admissions, minimize paperwork costs and help hospitals get supporting documentation into the EMR. Electronic forms systems can also improve patient safety and care, provide business continuity during HIS downtime and natural disasters, and bridge the gap between the EMR, EHR and LHR by providing consistent, familiar data in a one-stop electronic environment.

"The Access product suite is a vital part of our EMR solution," says Ron Olsen, senior systems analyst at Mercy Regional Health Center, a two-facility provider in Kansas. "It has increased patient safety and satisfaction, reduced costs and boosted productivity."

To learn more about how your hospital can discover the lasting benefits that automated forms management offers as a vital piece of the EMR puzzle, please contact an Access representative at 888.448.1811 or at info@accesseforms.com.

