

## Online patient records: A trend ASCs should learn to embrace

**M**ost ambulatory surgery centers (ASCs) have some form of computer-based recordkeeping, such as scheduling and billing systems. So far, however, few have made the leap to electronic medical records (EMRs).

With an EMR, clinicians enter data at the point of care, and that information is accessible to other clinical and administrative departments. The expanded capabilities of an electronic health record (EHR) allow other caregivers and the patient to see and update health information through secure Internet portals. For ASCs and other providers, immediate savings can result from staff efficiency and the end of maintenance costs for paper records.

However, as with conversion to the ICD-10 coding system, up-front purchase and training costs, initial loss of efficiency at start-up, and general reluctance to change a process that has worked in the past continue to make ASCs hesitate. To position themselves for the future, they will need to begin now. New health legislation, technological advances, and rising consumer involvement in their healthcare demand it.

### What is an EMR?

The Healthcare Information and Management Systems Society (HIMSS) defines an EMR as a computer-based record of a patient's conditions and treatment, created and maintained by a healthcare provider such as an ASC. HIMSS recognizes eight stages of adoption (0 to 7), based on the number of departments or outside service providers that participate. For example, pharmacy, laboratory, and radiology reports would appear in a Stage 1 record.

In its 2014 survey, HIMSS found the largest proportion of US hospitals, or 29.5%, had reached Stage 5 (sidebar, p 28).

The EMR system includes a clinical database, a list of acceptable medical terms, and real-time processing capability, allowing users to search for and update patient information. At the higher stages, the EMR has a function that allows physicians to enter care instructions on a personal computer or smartphone. This capability is called "computerized physician order entry (CPOE)."

According to HIMSS and other technology experts, there is a distinction, often overlooked, between EMRs and EHRs. The EHR is owned by the patient, and the patient can review and contribute to it. EMRs are records created by various caregivers that may be compiled, along with a patient access portal, into an EHR.

True EHRs are rare, except in comprehensive care organizations such as Kaiser Permanente and Department of Veterans Affairs hospitals.

The website [www.HealthIT.gov](http://www.HealthIT.gov) offers the official definitions of EMRs and EHRs. The site is maintained by the Office of the National Coordinator for Health Information Technology (ONC), which is part of the Department of Health and Human Services (HHS).

According to the ONC, "One of the key features of an EHR is that it can be created, managed, and consulted by authorized providers and staff across more than one healthcare organization. A single EHR can bring together information from current

and past doctors, emergency facilities, school and workplace clinics, pharmacies, laboratories, and medical imaging facilities.”

ONC defines an EMR as “a digital version of the paper charts in the clinician’s office. An EMR contains the medical and treatment history of the patients in one practice.”

### Where are we now?

HIMSS, which tracks technology use, reports that as of October 1, 2014, only 3.4% of US hospitals had fully implemented what HIMSS considers a “complete EMR.” That is a small increase from the 1% adoption rate HIMSS reported in 2010. A complete EMR includes data sharing among caregivers, including ASCs. However, nearly 30% of hospitals had multi-function EMRs and were on their way to completion. Meanwhile, 4.4% of hospitals had not even begun to adopt EMRs.

Information technology consultant and HIMSS fellow Marion Jenkins, PhD, estimates that fewer than 10% of ASCs have established true EMRs, and their adoption rate has remained stagnant. “Not much has changed with ASCs other than consolidation and acquisition by hospitals, which is driving them more toward hospital systems,” he says.

The Wallingford, Connecticut-based company SourceMedical markets its Vision EHR to ASCs, and a statement on its website notes: “Despite the many benefits EHRs offer, widespread adoption remains slow within the ASC community. Many ASCs are reluctant to move forward for fear of implementations that are non-conducive to an ASC workflow.”

ASCs do not usually see patients more than once, so EMRs may seem impractical, Jenkins adds. “Most patients won’t come back,” he says.

There may be an additional factor: When the Centers for Medicare & Medicaid Services (CMS) began implementing the Patient Protection and Affordable Care Act (ACA) provision offering financial incentives for EMR and EHR use, the agency did not include ASCs. It did, however, include physician practices, which may be owners or investors in ASCs, so adoption may expand via practices as well as hospitals.

The timeline is briefly as follows:

- October 1, 2014: Medicare-eligible hospitals began tracking EMR use for reporting in 2015.
- November 30, 2014: Hospitals were required to attest to meaningful use, as defined by CMS, of their EMRs.
- December 31, 2014: This marked the end of the reporting period for physicians and other healthcare professionals.
- February 28, 2015: This is the attestation deadline for healthcare professionals.

Healthcare providers who have not met the deadlines will forfeit incentive payments from CMS. ASCs, however, are not included in the incentive program, called Health Information Technology for Economic and Clinical Health Act (HITECH).

US EMR Adoption Model <sup>SM</sup>			
Stage	Cumulative Capabilities	2014 Q2	2014 Q3
Stage 7	Complete EMR; CCD transactions to share data; Data warehousing; Data continuity with ED, ambulatory, OP	3.2%	3.4%
Stage 6	Physician documentation (structured templates), full CDSS (variance & compliance), full R-PACS	15.0%	16.5%
Stage 5	Closed loop medication administration	27.5%	29.5%
Stage 4	CPOE, Clinical Decision Support (clinical protocols)	15.3%	14.5%
Stage 3	Nursing/clinical documentation (flow sheets), CDSS (error checking), PACS available outside Radiology	25.4%	23.9%
Stage 2	CDR, Controlled Medical Vocabulary, CDS, may have Document Imaging; HIE capable	5.9%	5.3%
Stage 1	Ancillaries - Lab, Rad, Pharmacy - All Installed	2.8%	2.5%
Stage 0	All Three Ancillaries Not Installed	4.9%	4.4%

Data from HIMSS Analytics™ Database © 2014

N = 5,447      N = 5,453

## Choosing an EMR

With a growing number of vendors either adding ASC-specific EMRs to their product lines or specializing entirely in serving ASCs, it should be easier to find an appropriate EMR. Based on comments from users and industry experts, a few ground rules emerge for selecting an EMR.

- **Suitability.** ASCs frequently are associated with hospitals or physician practices, and will be encouraged—or perhaps required—to adopt those systems. Yet, ASCs have different needs. An ASC might have many specialties, with varying workflows and types of procedures. The EMR must be flexible enough to include data from each type of case.
- **Adaptability.** Although the ASC structure and caseload may be unique, its EMR is part of a system that includes other caregivers, insurers, and contracted service providers, such as outsource billing companies. Interfacing with multiple systems is one of the main challenges of installing a new EMR.
- **User friendliness.** The EMR system should be easy to learn even for people without extensive computer experience, and it should be expandable to add new specialties. The transition from paper should be no more than a few weeks, though the benefits may not appear for several months. The vendor should provide in-person training at least to some of the staff, who can then train others.
- **Meaningful use.** ASCs are not (yet) subject to reimbursement penalties, but they should insist that EMRs have the capacity to become full EHRs and comply with CMS requirements for “meaningful use.” Briefly, to achieve meaningful use, healthcare providers must use the technology to improve care coordination and involve patients and their families in their own care, while maintaining privacy and information security. Ultimate goals include better clinical outcomes and more comprehensive research data. HHS defines 3 stages of meaningful use, to be completed by hospitals and physicians by 2016: data capture and sharing, advanced clinical processes, and improved outcomes.

HHS and its ONC division have certified certain vendors and products as compliant with meaningful use requirements.

## Early adopters

Among ASCs that have implemented EMRs are Harmony Surgery Center in Fort Collins, Colorado, and Stratham Ambulatory Surgery Center in Stratham, New Hampshire. Stratham, with one OR and one procedure room, has a volume of about 200 cases per month. The Vision EHR from SourceMedical was installed when Stratham opened in 2009.

“We never had paper,” clinical director Deb Menke, BSN, RN, CNOR, recalls. “It was a learning curve at first.” Since then, SourceMedical has completed several upgrades, she notes.

Stratham is an example of a small, independent ASC using a basic EMR. The Vision product is not a true EHR because it is not accessible electronically by patients or other healthcare organizations. It is on an in-house server, maintained by the ASC’s information technology consultant. Users see and enter data on Windows-based tablets. When an outside physician or hospital needs to see a patient’s record, Stratham prints a hard copy. Records cannot be transmitted by email, Menke notes, making them highly secure.

Harmony is gradually building its own model, using different vendors for different components and retaining paper records for several specialties. One reason for the hybrid model, according to administrator Rebecca Craig, RN, CNOR, CASC, CPC-H, is that, like many ASCs, Harmony has its own business software, and it has been difficult to find commercial EMRs that can be integrated with these legacy systems.

“An EMR would have one vendor for the entire system,” Craig explains. “The other software systems we utilize would interface with the EMR.”

Harmony, with four ORs, is affiliated with the University of Colorado Hospital (UCH). About 50% of the case volume consists of gastroenterology procedures, and most of the others are pain management. The use of ProVation MD, a software template designed for clinical procedure documentation, allows physicians to input information, eliminating the need for dictation and transcription.

In 2012, Harmony implemented AmkaiCharts, the EMR product from Amkai Solutions. “Once the ProVation procedure report has been completed, we have an interface engine, Corepoint Health, which we love, that automatically sends a PDF file to AmkaiCharts,” Craig explains. MedTek, a transcription company, delivers operative reports in PDF format directly to AmkaiCharts.

The next step will be to add CPOE after physicians have had training on the EpicCare inpatient clinical system, the product adopted by UCH. “We are hoping to implement our CPOE component next year, which will make us close to paperless,” Craig says.

Craig has used her experience to design a presentation to help other ASCs select and implement EMRs. “There’s a learning curve,” she warns. Clinicians must master the skill of typing data on a laptop or other device. “It adds another dimension for nurses,” she notes.

### **Worth the effort**

No one denies that exchanging a traditional paper file system for a keyboard and monitor will be a challenge. Equally difficult for some employees will be sharing information with colleagues to eliminate silos. But the law, the marketplace, and impact of technology on the ASC workflow will make the move inevitable.

It may help to remember that the process will be worthwhile in the end. As SourceMedical’s website reminds customers: “The biggest benefit to implementing an EHR system is the ability to deliver higher quality care.” ❖

—Paula DeJohn

### **References**

HIMSS Analytics 2014 Database. US EMR adoption model. Chicago: HIMSS Analytics.  
<http://www.himssanalytics.org/data/HADB.aspx>.

CMS EHR incentives and certification. [www.healthit.gov/providers-professionals/meaningful-use-definition-objectives](http://www.healthit.gov/providers-professionals/meaningful-use-definition-objectives).