Is it time for a surgery center EMR?

The few ambulatory surgery centers (ASC) that use full electronic medical records (EMR) systems are not only ahead of their colleagues in the ASC industry. They are outpacing most hospitals as well.

That does not mean others can safely ignore the trend. Before long, industry experts agree, health care organizations still using paper records will be like people who neglected to purchase digital televisions: left in the dark.

The gap is huge.

The Chicago-based Healthcare Information and Management Systems Society (HIMSS), which tracks technology use, reports that as of the end of 2010, only 1% of US hospitals had fully implemented what HIMSS considers a “complete EMR.” Most health care organizations, including surgery centers, as well as vendors, consultants, and government agencies, rely on HIMSS research and analysis regarding technology standards.

Regarding costs, software, training, and implementation would run $45,000 to $50,000, with ongoing software support typically 15% to 20% per year.

How many have EMRs?

While virtually all ASCs have some form of computer-based recordkeeping (scheduling and billing, for instance), less than 10% have true EMRs, according to information technology consultant and HIMSS fellow Marion Jenkins, PhD. For medical practices, the adoption rate is higher, but still only about 20%.

Jenkins is CEO of Denver-based QSE Technologies, an information technology (IT) general contractor for computer systems. He says QSE has installed some form of electronic records systems in about 80 surgery centers, but few are complete EMRs.

The Ambulatory Surgical Center Association, Alexandria, Virginia, says it has no information on the number of member ASCs with EMRs.

Definitions are important

What, exactly, is an EMR? According to HIMSS, it is a computer-based record of a patient’s clinical conditions and treatment, contained in an electronic file owned by the health care provider (such as an ASC) that creates and maintains it.

HIMSS recognizes 8 levels of adoption that are increasingly comprehensive, ranging from laboratory and radiology reports, through nursing records, medication orders, physician documentation, and finally, the ability to transmit the data to other providers.

In a survey of US hospitals, HIMSS found that in 2010, only 1% had reached level 7, meaning they were able to record, maintain, and transmit clinical data to other
organizations; had data warehousing capability; and could maintain data continuity with their emergency and outpatient departments.

In contrast, HIMSS found 49% of hospitals had reached level 3. These hospitals had digital radiology and diagnostic and nursing reports in an electronic system but lacked the other functions, including data sharing and decision support.

**EMR components**

Components of an EMR typically include a clinical database, a list of acceptable medical terms, and real-time processing capability, so users can search for data and input changes and additions.

HIMSS insists EMRs are not to be confused with EHRs, electronic health records. Though many use the terms interchangeably, these terms describe completely different concepts, notes a HIMSS Analytics white paper issued in 2006.

The EHR, according to HIMSS, is owned by the patient. It includes the EMRs created by various caregivers regardless of location, and these caregivers, as well as the patient, can access and contribute to the record.

“EHRs are reliant on EMRs being in place,” the HIMSS paper states, “and EMRs will never reach their full potential without interoperable EHRs in place.”

Jenkins says true EHRs “generally do not exist yet” except within comprehensive care organizations such as Kaiser Permanente and the Department of Veterans Affairs hospitals. He also makes a distinction between the EHR, which is patient-centric and covers care from various sources, and the Personal Health Record (PHR), which is actually owned by the patient.

**If Domino’s can...**

While QSE has installed IT hardware such as computer servers in many ASCs, selling EMRs has not been easy, Jenkins says: “Most ASCs don’t feel they need them.” One reason, he notes, is that ASCs usually do not have long-term relationships with patients the way primary care physicians do. A patient comes in for a specific operation and then never returns (with some exceptions, such as periodic colonoscopies).

ASCs would rather invest in software to manage the business side, such as patient accounts and billing. They keep clinical records on paper.

Jenkins argues that such a policy is shortsighted for many reasons.

“I personally feel that even one-time patient contact justifies an EMR,” he says. “Domino’s [Pizza] has your information from the last time you ordered.” In other words, patients expect to see one-time data entry, not forms to fill out for each visit. Even more critical, ASCs cannot join the inevitable movement toward EHRs if they cannot contribute data from their clinical records.

Besides, eventually the law will catch up with them, Jenkins and other industry observers agree. The American Recovery and Reinvestment Act (ARRA) of 2009 includes a section called Health Information Technology for Economic and Clinical Health Act (HITECH), which provides incentives and penalties designed to encourage hospitals and physicians to use EMRs but does not mention ASCs.

“Most people feel that will change at some point,” Jenkins warns.

**How to select an EMR system**

While a minority of ASCs have EMRs, most others are in the research stage, assessing how EMRs could fit into their long-term strategies. Jenkins urges managers
to look first at their current operations and culture.
Some suggested steps:

**Find a clinical champion**
A clinical champion, a nurse or physician, is critical, he says. With a commitment to proceed, the manager can then begin the process of selecting hardware and software, training staff, and ultimately reaping the financial and operational benefits of electronic records.

**Develop an initial vendor list**
Whether the ASC chooses an outside consultant or internal coordinator, it should develop a detailed evaluation process for potential vendors. “Don’t just look at a demo and decide,” he cautions.

The planning committee should compile a list of vendors to consider. The list will be short, Jenkins says, because “fewer than 10” have developed EMR systems for ASCs. Among these are SourceMedical in Wallingford, Connecticut, and Amkai Solutions in Waterbury, Connecticut.

**Evaluate vendor systems**
Develop a checklist based on functionality and use it to evaluate each vendor’s system, Jenkins advises.

“Make each vendor demonstrate how it will address each specialty, such as receiving supplies and tracking costs,” Jenkins says. “Physicians will look for clinical things, such as tracking drug allergies and displaying lab results and presurgery workups.”

Then rank systems in each category and list those with the best average scores.

“Don’t fall in love with the demo,” he repeats, noting that it is easy to be captivated by a skilled presenter and well-designed, colorful screens.

Call in the finalists, based on functionality scores, and discuss the price and implementation timeframe for each.

**Check references**
Jenkins adds a final step, which he says too few managers carry out: checking references. “You’d be surprised at how few people do that. Go to conferences, talk to your colleagues. Don’t just take the names the vendor gives you.”

**Don’t pave the cow path**
The story doesn’t end with the contract award. Even if a consultant is helping with implementation, changing to EMRs will involve the entire ASC organization.

To take advantage of the automation of records, it is necessary to streamline the workflow, Jenkins notes. “Say you have 5 forms, and the patient’s name, address, and other information is repeated on all of them. You could copy them into the electronic system 5 different times on 5 different screens, to match the manual process. That’s a complete waste of time. It’s known as paving over the cow path.”

Instead, he advises, let the system do the work of maintaining background information, to be called up as needed.

When converting to an EMR, he says, most ASCs will leave existing paper records alone: “Most patients won’t come back.” Initiate EMRs only for those who do return and for new patients.

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**EMR usability checklist**
The Healthcare Information and Management Systems Society (HIMSS) checklist for EMR usability includes:
- simplicity
- naturalness
- consistency
- minimizing cognitive load
- efficient interactions
- forgiveness and feedback
- effective use of language
- effective information presentation
- preservation of context.
Don’t neglect training

Finally, he advises, do not neglect training. “Just because the staff knows Windows, they still need training,” he says. He recommends the “train the trainer” approach, having a vendor representative give several days of intensive training to selected staff members, who will then be trainers to the rest.

At an ASC, conversion to EMRs should take no more than several weeks, according to Jenkins—however, achieving the full benefit and functionality will require months.

Once the staff is used to entering clinical, scheduling, and billing information directly into the EMR templates, it is time to begin reaping the benefits, Jenkins says. “You are ready to really get the value out of the system.”

He recommends working with the vendor to get the best use of system features, and joining user groups. Do not expect to see ROI numbers immediately, he notes. “There have been few objective studies, so it’s hard to prove—but every other industry has long ago adopted this type of technology.”

The hybrid way

Harmony Surgery Center in Fort Collins, Colorado, is taking a “little by little” approach to automating patient records. The multispecialty facility, which is affiliated with nearby Poudre Valley Health System, has 4 ORs plus procedure rooms and 6 rooms for extended stays. About 50% of the case volume is GI procedures. Currently, Harmony has what is known as a “hybrid” system, in which the GI business and the physician portion of pain management is electronic, while the rest of the pain management and administrative record remain on paper.

CEO Rebecca Craig, RN, CNOR, CASC, CPC-H, says her long-range goal is to unify all records in a single system. Only then will she consider the result to be a true EMR.

“If you don’t have one databank, I wouldn’t call it an EMR,” Craig says. “That’s why I call ours a hybrid.”

For most GI procedures, physicians compose reports on a computer rather than dictating them. ProVation Medical, a division of Wolters Kluwer Health, provides the clinical template for documentation. Other vendors supply administrative components, all of which can be uploaded to a future EMR.

“An EMR would have one vendor for the entire system,” Craig says. “The other software systems we utilize would interface with the EMR. Now, we use several, and sometimes the interfaces can be challenging.”

Because Harmony performs screening colonoscopies and regular pain management procedures, repeat patients are common. Craig would like to establish EMRs because, she says, “They would give the physicians a better picture of each patient’s procedural history with us.”

Why it won’t be easy

Craig has developed a presentation to help other ASCs navigate the long road to EMRs and EHRs. She explained reasons ASCs have been slow to move ahead. One is the cost, which includes both the up-front investment and reduced productivity while the staff learns the new system. ASCs do not even have the financial incentives the ARRA-HITECH law gives other providers.

Another is interfacing. Most ASCs already have billing and other software, but it may not be compatible with EMRs on the market. “Communications between vendor systems are both complex and not standardized,” HIMSS announced in a recent re-
port.

Since usability is the ultimate goal, HIMSS has a checklist for developers and users (sidebar, p 28).

Use of the ProVation software has helped improve efficiency, Craig says, so she expects adoption of a full EMR to provide even greater benefits.

At first, she warns, “there’s a learning curve” to master the skill of typing answers on a laptop. “It adds another dimension for nurses. They not only focus on the patient but have to make sure the computer is working. If you are documenting on paper, nothing on the paper flashes up ‘error.’”

—Paula DeJohn

References
