OBG MANAGEMENT

In the archives

For a primer on electronic medical records, see the first part of this article from the July 2007 issue of OBG Management online at **www.obgmanagement.com**

MODERATOR

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PANELISTS

B. David Hall, MD
Frank O. Page, MD
Don Shuwarger, MD
Mark A. VanMeter

Dr. Bates is founder and chief executive officer of digiChart, Inc., an electronic medical records system for ObGyn practices.

Dr. Shuwarger is a current user of digiChart's electronic medical records system for ObGyns. He pays for his service and received no consideration for this article from digiChart.

Dr. Hall, Dr. Page, and Mr. VanMeter report no financial relationships relevant to this article.

IN THIS ARTICLE

Voices of experience weigh in

Do electronic medical records make for a better practice?

Success, apprehension, satisfaction, struggle—all describe ObGyns' experience with EMR. Part 2 of 2.

Are your colleagues in private practice who have made the transition to a system of electronic medical records (EMR) satisfied with their decision and experience? Yes and, on some points, less than yes.

For practices that—perhaps, like yours—haven't made the leap, the question is: What's holding them back?

In this concluding installment of a two-part article on EMR, a panel of three ObGyns and one ObGyn practice administrator talk with Moderator G. William Bates, MD, MBA, about, in the case of two practices, the work of bringing EMR into their offices. Two other panelists describe their practices' calculated reluctance to discard paper processes right now.

Why have you and your partners adopted EMR?

Shuwarger: Our practice quickly identified the direct and indirect benefits of bringing technology to bear on our processes. Paper records were often illegible, misplaced, or being used by another staff member. We recognized that to meet our internal goals for growth, increasing patient safety, and streamlining processes, we would have to adopt an EMR solution that met those needs.

Hall: Our practice was drowning in paperwork. An exam room was recently converted to hold more charts, and two warehouses held our overflow. Employees were constantly searching for records, and telephone messages were delayed for hours or days until the chart could be reviewed. Notoriously bad handwriting and incomplete documentation hampered good communication and good medical care. Transcription costs were out of control. Forms helped but added to ongoing costs and storage problems.

What efficiency gains have you achieved?

Shuwarger: Forest Women's Center is able to see more patients in the day because our ObGyn-specific EMR system has a "Patient Portal" that enables patients to enter all their history and complaint-specific information in advance of a visit. Another efficiency is the time gained by never searching for lost or misplaced charts. We also like the ability to access our records 24-7-365.

Hall: The patient's chart is readily available. Hours of searching have been eliminated, and patients' questions, lab reports, and prescription refills can be managed with very few steps. The physician can record recommendations and

Who is who on the roundtable panel

MODERATOR

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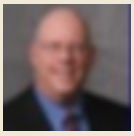
PANELISTS
Have introduced EMR to their practice



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Rowan OB/GYN Associates, Salisbury, NC

Don Shuwarger, MD, FACOG
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PANELISTS
Have not introduced EMR

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"Our billing staff loves the thorough documentation when it is time to file or appeal claims."
—Don Shuwarger, MD

treatment plans, which the staff relays to the patient. Records take about the same time to finish, but they are much more complete and legible, with dramatic gains in safety for the patient and improved liability protection for the physician.

Which features provide the greatest value?

Shuwarger: The patient portal that I mentioned is a great time saver for us. We were amazed at the acceptance and rapid adoption. Even our octogenarians love it. Universal access to data is of incalculable value. One of our physicians loves to go home early, have dinner, and then review his charts from home. EMR improves my recordkeeping, makes encounter documentation more complete, and helps me avoid medication errors. Our billing staff loves the thorough documentation when it is time to file or appeal claims.

Hall: Immediate access to a clear, legible, and complete patient record provides a solid foundation for our medical decision making.

How have your patients reacted to your conversion from paper to EMR?

Shuwarger: At the beginning, there were people who resisted the patient portal, but when they saw for themselves how it enhances the visit experience and helps their physician address their needs, they became vocal proponents.

Hall: Our patients are impressed with our knowledge of their history, with the fact that reports are immediately available, and with how responsive our staff is to their needs. Rather than creating a barrier to communication, TabletPCs allow them to see images of their own procedures, illustrations, treatment outlines, and even education videos. Flow sheets help mark their progress or encourage them to better adherence. Many seem pleased that their medical records are so cutting-edge. Their confidence in our medical skills appears enhanced.

Has your vendor met expectations?

Shuwarger: No—our vendor exceeded our expectations. We had experience with technology vendors before—"We'll overpromise and underdeliver" was their mantra! With our EMR vendor, however, our preparation was outstanding, the training was thorough, and implementation went better than any we had experienced. Our uptime has exceeded expectations. Enhancements have been well thought out.

And customer support was good at first but now is even better.

Hall: The program is extremely powerful, with an excellent architecture, but its flexibility is also its main limitation. Recently, core clinical content for primary

care medicine has been added, but specialty content remains severely limited. Value-added vendors have developed—at additional cost—excellent form-editing tools and specialty forms, and a vigorous users' community is generous in sharing forms and workflows. But untold hours were required to develop clinical and office workflows, document templates, and just to discover all the options in the system. The learning curve was huge, and further automation requires the skills of a computer programmer.

Our EMR and practice management systems are interfaced but not integrated—even though the same vendor developed them. The problem is that the interface requires several translation programs and multiple servers to implement. Our dependence on our network engineering firm to maintain our bank of servers and interfaces is worrisome—and costly.

Training on our system was inadequate. The basics of the system were covered but, beyond that, we are just now able to shift into second gear. Much of the system's potential remains untapped.

What is your approximate return on investment?

Shuwarger: We've grown receipts by 20%, year over year, since going with our ObGyn-specific EMR system. The rise in revenue is related directly to increased productivity, a reduction in lost charges, and improved collection from third-party payers because we can provide better documentation. At the least, our EMR system has returned $3 for every $1 spent, not counting intangibles.

Hall: Charge capture is much more complete and accurate, with readily available codes and guidelines. The greatest savings are in chart transcription, management, and storage.

Ongoing maintenance and upgrade costs, including hardware and networking software, have gone far beyond our initial investment, however. Problems with training and initial workflow design have slowed our return on investment. But we're making progress in that direction.

Are features lacking that would bring greater efficiency?

Shuwarger: Our labor suite wants data from our ACOG obstetric record to flow into its system to avoid the need to re-enter data manually. And our practice's physicians want the labor and delivery summary to populate our EMR. These issues of interconnection will be worked out as CCHIT certification (see "EMR certifying body arises from the private sector," page 62) brings disparate systems into proximity.

Hall: Physicians aren't computer programmers. We practice medicine, not EMR system development, and we are rarely on top of the "best practices" in practice workflow. Many of us who work with EMR may wish to customize a system to the way we practice, but that is not the best way to proceed. A robust and comprehensive specialty-specific set of clinical content that can be loaded as a unit

Key points about EMR from panel members' observations

- Streamlined history-taking and complaint-reporting may mean greater productivity in a practice—and a resulting ability to see more patients in a day
- A so-called patient portal gives patients easier access to providers and the varied resources and services of a practice, which boosts satisfaction
- Caveat emptor! Shop carefully when selecting a system vendor—the experiences of practices from installation through system maintenance range very widely
- Interconnectivity between an EMR system and other databases is not a given
- For a large, multisite practice, the cost of hardware alone may have a chilling effect on implementing an EMR system
- All physicians in a practice must buy into an EMR system that's being put into place—and a range of ages, attitudes, and practice patterns may be a cause for disagreement on how the system is to be best used
- There is concern among some that the federal government may shape the future of EMR by mandating that all systems in private practices interface with hospitals, insurers, and other providers.

"Ongoing maintenance and upgrade costs, including hardware and networking software, have gone far beyond our initial investment."

—B. David Hall, MD

EMR certifying body arises from the private sector

In 2004, President George W. Bush set a goal: nationwide adoption of EMR—to include all medical practices—within a decade. Subsequently, the US Department of Health and Human Services (HHS) established the Office of the National Coordinator for Health Information Technology and the American Health Information Community. The sweeping goal of these bodies? Better health care by application of information technology and creation of standards for certifying EMR systems that provide core functionality.

In response, three private-sector health information management groups jointly formed the Certification Commission for Healthcare Information Technology (CCHIT; www.cchit.org). In 2005, this independent private-sector entity entered into a contract with HHS, to, in the commission's words, "develop and evaluate certification criteria and create a voluntary inspection process for healthcare information technology" in three areas:

- Ambulatory EMR for offices
- Inpatient EMR for hospitals and health systems
- The network components through which EMR share information.

The work of CCHIT is ongoing; the commission provides voluntary certification of EMR systems, publishes a list of certified EMR systems, provides consultative services to providers and payers through its Web site, and even offers a bank of resources for patients on the intricacies and legalities of medical-record-keeping.

and easily updated is going to provide far greater efficiency than an infinitely customizable basic program.

I look forward to being able to integrate our private medical record with a central data repository, in which interactions with other specialists and medical centers—not the faulty memory of patients—provide a more accurate background and reduce costly duplication of our increasingly stretched medical resources.

Why haven't you and your partners adopted EMR?

Page: We recently converted to a new practice management software system, and we want to have all systems working properly and efficiently before implementing an EMR system. All options and processes must be reviewed before we implement EMR for the practice. These options include voice-activation software integrated with the EMR, practice process changes, and practice workflow adaptation.

VanMeter: For our independent practice, with five locations, the initial cost of hardware and software is clearly an early concern. With a rapidly changing hardware environment, once a decision is made, the technology that was proposed may be obsolete before being implemented. Then the continuing cost of hardware and software upgrades—read: "the newest gadget"—and maintenance is also a major budgetary item that we need to consider.

As with most medical practices, our organizational structure is flat. If we were to implement a client-server application, we'd need a systems administrator—and that again increases the cost to the practice. Then we're faced with the question of how we best utilize this person. Or do we outsource this function? And outsourcing then raises a concern of timely responsiveness to major system problems that may extend downtime, prohibiting the use of your EMR system.

Today, telecommunication costs have plummeted, so the costs of a T-1 line [for high-volume Internet access] and high-speed Internet service are not as onerous as they once were. But a major expense will be to retrofit all our offices (wiring, etc.) to adapt to an electronic environment.

Overall, this is a young industry. I compare it to what we saw with videotape technology in the 1970s: You had to choose between Beta and VHS formats. Once you made that decision, you paid a premium for the early technology.

Similarly, no one knows which EMR system will prevail over time. The early players are paying for the cost of start-up and research and development. As time goes on, we all know that costs should fall—significantly.

Another concern that we have is the long-term viability of the software ven-

dor. Until recently, most applications were developed by small independent firms. Their product was a proprietary one—for which only they have the code and only they could manipulate. If that vendor goes out of business, we'd be left to find a new system, and incur all those implementation costs again.

I think we'll see a major consolidation of vendors over the next several years—one that leaves only premier vendors with superior products in the market.

As a final concern, and perhaps most important, the role of the federal government weighs heavily on our minds. We believe that, very soon, Washington will mandate EMR and how they are to be accomplished. We also believe that the feds will require integration of medical practice EMR systems with the systems of hospitals, third-party payers, and other medical providers. Our belief is that money may become available—like the funding recently authorized for hospitals to subsidize software and maintenance costs—that will defray the cost of implementing an EMR system in our practice. When this comes to pass, we don't want to have to reinvent the wheel.

"I think we'll see a major consolidation of EMR vendors over the next several years—one that leaves only premier vendors with superior products in the market."

—Mark A.VanMeter

What economic barriers does EMR present?

Page: The economic barrier is really not capital expense but the perception that, for a significant period, EMR will require additional time from the medical staff, which reduces the number of patients seen by a physician and, therefore, affects compensation."

VanMeter: It seems that, when you purchase an EMR system, you have to comply with the way it works. The tail wags the dog. More flexibility in how a system works at the level of the individual provider would make it more economical in terms of productivity.

What features are lacking that causes you to delay adoption?

Page: Successful voice activation and complete handwriting functionality from laptop to chart.

Are there political barriers to adoption?

Page: EMR represents change, and this is always difficult for larger physician groups. Some physicians are still hesitant to make the transition to an EMR from a paper chart, even when the benefit of EMR is proven. Others are hesitant because they are not acclimated to using a computer in the setting of a patient visit.

VanMeter: First, and foremost, the buy-in of all physicians in a group is needed. In my group of 16 physicians and two nurse practitioners, this is tough—especially when age ranges from 31 to 67 years (four in their 60s and close to retirement). Finding consensus on a system will be difficult for that reason alone.

Second, for physicians who are in the twilight of their career, there's hesitancy to spend a large sum on a new system that, for them, is going to have a relatively short life span.

Third, and last, I am concerned about up-coding. Although an EMR system may allow you to document a level-4 or level-5 service, is that truly necessary for the patient's problem? With a yeast infection, for example, is a level-4 or level-5 service appropriate, even if the documentation supports it? ■

What else do you want to know?

Did this roundtable—or the descriptive article on EMR in the July 2007 issue of OBG Management—leave you with questions on what electronic medical records can do for your practice? Write to the Editors at OBG@dowdenhealth.com and tell us what you still need to know. Your question may become part of upcoming coverage of the topic in these pages.