

# EMR ADVISOR™

The monthly guide to maximizing the return on your investment in electronic medical records and computerized physician order entry systems

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## Integrated EMR, practice management system rocks on for Washington ENT practice

While in Cleveland, OH, in late January to share the stage with President George Bush and promote technology in health care, **Barth W. Doroshuk** took the time to visit a local attraction he'd long wanted to see: the Rock and Roll Hall of Fame.

For Doroshuk, chief operating officer of the Washington ENT Group (WENT), Washington, DC, participating with Bush in a panel at the Cleveland Clinic was the most dramatic recognition to date for the group's success with technology.

The fact that it intersected with his visit to the Hall of Fame is fitting. WENT started rockin' and rollin' with an integrated EMR and practice management system in 2001. And, witness the White House invitation to talk about what they've accomplished, the hits just keep on comin'.

Like many enshrined in the Hall, WENT does tours: each month about 100 physicians, practice managers and others tour their facilities. (For those who can't visit in person, there's a virtual tour at the WENT web site, [www.washingtonent.com](http://www.washingtonent.com).)

What they see is a fully digital practice that virtually eliminates paper and streamlines care:

- Physicians review the patient's medical record, take notes, write prescriptions and order tests using handheld wireless devices -- Windows CE CLIOS.
- Physicians and other staff use workstations for scheduling, phone messaging and sending reports to referring physicians.
- The practice typically receives and sends electronically the results of imaging tests like CT scans or audiology tests.
- Wireless connections in physicians' homes

provide access to the EMR.

- Patients can use computers with Internet access in the waiting room -- also referred to as the "Internet Cafe." They also can provide their medical histories using an application on the WENT web site.

### **More time for patients**

The integrated EMR and practice management system helps eliminate lost charts and data, speeds prescriptions and lab results, improves billing accuracy, and enhances patient privacy.

Patients benefit because physicians can spend more time with them, provide more timely diagnoses because information is up-to-date, and minimize inconvenience during visits to the practice, says Doroshuk.

There also are benefits for the practice.

The \$300,000 investment in software, hardware and networks paid for itself the first year, says Doroshuk. The biggest return came in staff reduction. In a typical ENT practice, about six full-time equivalent (FTE) employees support each physician, he explains. WENT's system delivers so much efficiency that the FTE per physician is now less than two.

Because the system eliminates filing paper and other clerical chores like transcription, one medical assistant can take care of a clinic with as many as four physicians.

"We can process 80 to 90 patients through one clinic with one medical assistant," says **John Casler**, MD, a partner in the practice who joined WENT about a year ago after a career in military medicine.

The system also enhances revenue because it

helps physicians record the details of a patient encounter.

"The system helps you recognize all of the diagnoses you've made and reminds you to record what you did during the encounter," says Casler. "It provides a detailed accounting of the entire encounter that is very auditable. It gets into an intangible. Physicians are concerned about being audited for compliance; they tend to under-code and short change themselves because they are not sure if their record can stand up to an audit. But if you have confidence that the record can stand up to audit, you can code appropriately. You do not hedge your bets by under-coding."

### The advantages stack up

After a year of using the EMR, Casler says he sees several advantages over paper records:

- **Portability.** "I can access the system anywhere there is an Internet connection," he says. "I can pull up a patient's medical record and speak intelligently about the case, make changes and enter them right there."

- **Accuracy.** "There is no question about handwriting," says Casler.

- **Integration.** Because clinical information from patient encounters is combined with coding, auditing concerns are automatically addressed, he says. In addition, clinical information such as lab results and prescriptions are integrated in one record. "It makes it very efficient," he says.

Although the practice has not measured changes in the quality of its outcomes at this point, Casler expects that to happen and suggests the system does help improve quality.

"When you can eliminate the variations of a practice, you raise the level of quality," he says. "The EMR helps takes the guess work out of the practice. That's where being able to customize the system comes in. You can create a template and make decisions according to the right indications and contraindications."

Another benefit to the

practice is the speed of payment. The practice management system extracts billing information from the EMR encounter log and can send out bills the same day, says Doroshuk. Payers who do electronic payments typically turn around the bill in 16 days.

About two-thirds of payments are made in 30 days and the average number of accounts receivable days is 42, which, he says, "is really low."

### Can't always get what you want?

The system today serves three offices: one in downtown Washington, a satellite office at the Washington Hospital Center, and a location in Bethesda, MD. The staff includes seven physicians and four professional-level hearing and speech specialists. The ear, nose and throat practice's expertise includes snoring and sleep disorders, voice problems, sinus disease, and treatment of masses of the oral cavity, larynx, and neck.

When Doroshuk, his wife -- **Cathy Picken**, MD -- and **Thomas Troost**, MD, PhD, began planning for the new practice a little more than five years ago, theirs was one of the first in the area willing to risk a paperless patient record system.

Equipped with a background as an engineer for a utility company, Doroshuk's role was to develop the practice's business operations plan.

Figure 1: Patient Encounter Workflow

Check In	<ul style="list-style-type: none"> <li>▪ No paperwork is required of patient</li> <li>▪ Patient awaits appointment in Internet Cafe</li> <li>▪ The digital office sends notification to providers that patient is ready for appointment</li> </ul>
Pre-appointment exam	<ul style="list-style-type: none"> <li>▪ Patient is made comfortable in exam room</li> <li>▪ Medical assistant review patient's chief complaint</li> <li>▪ Medical assistant enters chief complaint and other pertinent information into the digital office system via computer kiosk outside office</li> </ul>
Physician examination	<ul style="list-style-type: none"> <li>▪ Physician performs exam using comprehensive chart information</li> <li>▪ No duplicate questioning of patient</li> <li>▪ Using a hand-held wireless device physician reviews current labs, present condition and previous encounters; physician generates orders</li> </ul>
Encounter results	<ul style="list-style-type: none"> <li>▪ Instantaneous management of examination results (prescriptions, lab tests, follow-up appointments, billing levels, surgery scheduling if necessary)</li> <li>▪ Digital office sends all orders and billing information to front desk in time for patient check-out</li> </ul>
Check out	<ul style="list-style-type: none"> <li>▪ Patient is given all relevant information related to prescriptions, billing and next appointment</li> <li>▪ Claim is submitted electronically and billed per provider</li> </ul>

Source: Washington ENT Group

He says he spent nine months in 2000 "building a desktop model of what the practice would look like, how it would operate, and what it could accomplish."

When the model was completed, he turned his attention to reviewing available technology.

"Initially we rejected a completely computerized office," he recalls. "There were some well-documented examples of failures with so-called paperless offices."

Despite the initial misgivings, the founders looked at EMR and practice management software packages. There were more than 1,000 on the market, so the group hired a consultant who helped them narrow the field to five suppliers.

"We went through a functional analysis, and it was a very important part of selecting the EMR package," Doroshuk says. "All EMR packages offer a lot of the same things. We asked ourselves, 'What are the details of how we want to conduct ourselves as physicians?' That is what sways you to select one package rather than another."

Part of the analysis involved designing a new paperless workflow (see **Figure 1**) and understanding the behavioral changes that would follow.

Ultimately the group settled on HealthMatics Office from A4 Health Systems, of Cary, NC. One of the features the group liked was the fact that the EMR and PM systems operate as a single clinical, financial and administrative system. They also were impressed by aspects of the company beyond the product.

"We thought they had some great leadership and strong financial numbers," he says. "That made us feel comfortable that they could meet our needs and also that they would be around for a while."

But doubts remained. "A lot of people didn't think it would work," he recalls.

On March 1, 2001, the new practice and its system were up and running.

### **Start me up**

"We followed the 'big bang' theory," recalls Doroshuk. "We used everything from day one."

Today, he says, the most valuable lesson learned was the importance of spending time prior to implementation talking about how to manage the changes that the paperless system would create for patients and staff, and then continuing to make adjustments after the practice opened for business.

"We asked ourselves how the system would affect behavior," he says. "What would happen when a patient shows up and says he's

here for his 8 a.m. appointment? We tracked the entire encounter and we talked about what types of changes we'd see. After we opened we sat down for several weeks, every night for a half hour, and discussed what everybody learned that day. That kind of involvement of the staff helped create an environment where everyone was comfortable. It was a very valuable part of the start up."

Physicians and other staff received a week of training prior to going live. As the practice and system mature, WENT continues to train its staff and physicians, new and old.

Every six months, A4 trainers are brought in for classes. The software, says Doroshuk, "is like Microsoft Word in that when you start using it you can't possibly learn everything it can do. It is very powerful. So, while the classes help new employees, they also help experienced staff learn new capabilities. Training has been a very important part of implementing the system."

Casler agrees that continuing training is important.

"When I first came on board last year, the initial training was almost overwhelming," he says. "My brain was saturated. But over the following months as I mastered that material, I started feeling that I could go for more. I'm able to look for ways to improve efficiency, to ask questions that I would not even have thought about asking at first. My brain gets re-saturated and the cycle is repeated. So continuing training is critical."

Tweaking the system is a never-ending task.

"An EMR is not just a filing system," says Doroshuk. "It is a very large artificial intelligence system. If you can get your mind in synch with the database, you can build the 'what-ifs' that guide you through each exam. Patients can come in with runny nose; it could be a lot of things but the system helps narrow in. It is constantly maturing."

As others have adopted the A4 system, Doroshuk says, other practices have joined WENT in training sessions, the better to stretch available dollars.

### **Sharing the costs, challenges**

"We just started hosting a regional users group," he says. "When we started in 2001 we were the only kids on the block to have a system like this. Now there are a dozen practices -- internists, allergists, cardiologists -- and we decided to begin to create a dialog with other offices that use the same EMR. Organizations like the Cleveland Clinic have enormous resources,

but most practices don't. An investment in the \$100,000 to \$300,000 range is huge for them. So we try to gather users and try to share experiences, training and cost."

Although WENT was able to start with a clean sheet of paper, so to speak -- planning a new practice and a new EMR system -- retrofitting a practice if not foreign to the group. Recently WENT took over an existing practice and, with their infrastructure already in place, the transition mainly involved setting up communication lines to connect the new office.

"It is not hard to do it in an existing practice," he says. "For example, you don't have to scan 7,000 charts the first day: you just do it when the patient comes in for an appointment.

We hire college kids to scan records. It is not as complicated as some people make it out to be."

The question that seems most on the minds of those new to using an EMR?

"What happens when it crashes?"

WENT's system crashed last summer, Doroshuk says, for the first time in four years. "We have a good back-up system and we got through it," he explains. "It is survivable."

But Doroshuk concedes that he didn't completely appreciate what going paperless meant.

"We built cabinets that are empty because we don't have any paper files," he explains. "We made a lot of space for things we don't need."

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