

Implementing EMRs in the Practice Setting

Part 2: Medium-Sized Practices



Editor's Note: Last month HONI initiated our three-part series that examines adding an electronic medical record system (EMR) from the private practice point of view. We spoke with Dr. Wael Harb, a solo practitioner in Horizon Oncology Center in Lafayette, Ind.

This month we move to medium-sized practices, talking with two practices with different needs and concerns. It is interesting to compare how some issues vary from practice to practice, while other goals are universal. One emerging theme is that technology is an important counter to a changing reimbursement world.

Our interview with Harvey Katzen, MD, of Oncology Hematology Associates PA is first, followed by our conversation with Terry McKay, president and CEO of West Michigan Cancer Center. The series will finish next month with a discussion with a large practice.

ONCOLOGY HEMATOLOGY ASSOCIATES PA

Oncology Hematology Associates PA has two offices 15 miles apart in Clinton and Greenbelt, Md. It is a five-physician medical oncology practice that sees approximately 100 to 120 patients a day.

HONI: What prompted you to consider an EMR?

Dr. Katzen: There are a couple of parts to it. For a number of years we've had two separate locations, two sets of offices about 15 miles apart. We made the decision long ago to keep all of the charts in one main office, where all the transcription



Dr. Harvey Katzen (left), Oncology Hematology Associates PA, meets with the vendor's medical executive Dr. Joel Goldwein.

and all the paperwork are done. So somebody physically had to carry the charts from one office to the other. As our practice has grown, we've added more physicians, more patients, and keeping up with the paperwork was a nightmare. Nobody was exactly sure where a chart was. When a telephone call came, for example, was the chart in the file? We usually knew when the chart was pulled for the day's patients, but finding the charts for the other patients

could involve hunting in several different places. Pulling the charts for the next day's patients could take two hours of one to two full-time equivalents (FTEs). The chart could have been in the typing area, or with the people who were putting in the laboratory data, and what not. I felt it was a totally inefficient system, and costing us more and more money and more clerical positions.

Those two issues were the main motivation. I wanted to see about increasing our efficiency and giving multiple people access to charts at the same time. For example, if a patient walked into the satellite office and you didn't have their chart there, someone had to find the chart, and then fax parts of the chart so the doctor could review the last blood counts, treatments, progress notes, etc.

HONI: What research did you do when looking for an EMR?

Dr. Katzen: A lot! I've been in practice now 24 years, and about 6 years ago I had the initial concept. I began looking around and talking to other physicians, a couple of times looking at exhibits at various medical meetings. Gradually, I followed up on ads in various journals (whether oncology-specific journals or annals of internal medicine or even *JAMA*), and I figured out that we needed a fairly sophisticated system because not only did we have multiple physicians but we also had multiple locations.

I made a couple of mistakes along the way. For example, I thought one thing that would go over well and help our overall efficiency was voice recognition software. The mistake I made was I did not include my office staff. I made the decision and bought a program, and it just didn't work out well. If my staff had been involved, we might have approached it a little differently.

When I decided we were going to move forward with an EMR, it was after a lot of discussion, not only about the price, but the concept of it. I knew I would need to get the acceptance of it beforehand from my partners. Then I decided to form a committee of the various areas of my office. I wanted to include the people at our front desk, the laboratory, the business office, from nursing, and the office and office manager. I specifically excluded myself from the demonstrations. I gave the committee several vendors whom I thought they should see. I gave them the opportunity to seek other vendors if they wanted. My instructions to them were "I think we need to do this, but I want to hear your opinion at the end of the process. We need the electronic chart that is best for our office. Not necessarily the best system available." We didn't need the most expensive system, and many of the systems are designed for hospitals and multispecialty groups.

Along the way I had formulated that we would be best served by an oncology-specific product. I did not think it would be intelligent for us, as a very active oncology practice, to re-create the wheel. I thought it would be best to buy a product designed for oncology, and that helped to pare down to a couple of vendors.

HONI: Did involving the committee the way you did help ease fears and any resistance to an EMR?

Dr. Katzen: Absolutely. The oldest physician in our group is 60 years old, and the youngest is 35. Clearly, the younger physicians are more receptive to the technology and the older physicians were more resistant. Having said that, the oldest and founding member of our group is very open minded in terms of investing in the practice, the longevity of the prac-

tice, and doing things to make the practice better. He was very willing to sit down with an open mind to see a demonstration.

In terms of the committee, we started with some people who had computers at home and some who did not have computers at home. As the group went on, they became extremely capable of questioning the various companies that delivered presentations. They knew exactly what they wanted the system to do. It was not something that was done in a month or two. The decision process, once the committee was put together, was at least six months. Our process was this: They would interview a vendor, and I would sort of do a debriefing with them independently, one on one in the next one or two days. I always wanted to do it right away. All of the committee members took notes at each vendor demonstration. As time went on, I asked them to begin to formulate what they did and did not like about each vendor. What they would like to see that they were not seeing . . . Did we need to seek other vendors?

By the time they were at a point to reach a decision, the committee was enthusiastic and eager to get the process started.

After we selected the vendor by a unanimous committee decision, I had that vendor do a second demonstration for the physicians in the group in an evening. We purposely held it in the evening so we would not be distracted or worried that we had to see patients and take phone calls. It took about 3 1/2 hours, and it was a very thorough demonstration. We asked a lot of specific questions. It did not go as smoothly as you might think. The physicians wanted to see specific things, and one physician had one idea, another had a different idea, and both wanted to be answered simultaneously. Then my office manager and I went on a site visit to see the program in action. That was a very significant part of what we needed to be certain we chose the right vendor.

HONI: After selecting a vendor, how did you implement the EMR?

Dr. Katzen: Part of what we paid for was not only the software. I wanted to purchase the majority of the hardware through the vendor because I never wanted to be in a position where, if we had problems, the vendor would point a finger at the hardware distributor. I wanted to make one call for service—whether it was a hardware or a software problem. Part of the contractual agreement was a staged implementation that included onsite training. The first part of the implementation was a several-day training session that involved just the ability for the physicians to capture charges and the billing staff to bill the charges. Because we've been computerized in our billing for more than 20 years, the learning curve for the billing staff was much less a problem than the learning curve for the physicians. For 25 years or so, we've walked around with a superbill, circled what we had done, and handed it to the front desk or the billing people. After the training session, the physicians began to use the computer, either a stationary or a mobile tablet. We became familiar with the computer and the system we had purchased. We

started that in November. That's all we were doing at first. I'm glad that's all we did, because it took awhile to get comfortable with it. We ultimately went live with the electronic record three months later. In my opinion, that was a necessary delay for us to become comfortable with the basic mechanics of the hardware and software.

Again, prior to actually going live with the electronic record, we had an additional four-day training session with several trainers. On the final day, the trainers basically stood by our side as we saw patients and charted or assigned treatment plans in the computer, including follow-up appointments, x-rays, CAT scans, and so forth. The training was quite extensive.

HONI: It's interesting you mention implementing in stages because Dr. Harb found the same process worked well for his office (see May 2004 *HONI*).

Dr. Katzen: I'll be honest with you. Adding an EMR was my idea, and I wanted it to happen, and I wanted it to happen right away. Initially, I was disappointed that we were going to do it in stages and said, if we are going to do it in stages, why don't we do it two weeks later. Retrospectively, the best thing we ever did was have a three-month learning curve to get used to working with the computer. As I mentioned, we carry around a wireless tablet, and we have radio frequency communication for the physicians and nurses who walk around with the portable devices. If we hadn't had that three-month interval, it would have failed. It was crucial to do it in staged implementation. Our vendor absolutely recommended it.

HONI: You seem to be a bit ahead of the curve on using the wireless applications. Do you find advantages to wireless system and the tablets?

Dr. Katzen: I have learned a couple of things with the wireless tablets. For 24 years, I have personally been used to going into the patient's room with a chart—someone wants to review an x-ray, I want to reiterate or review when they are due for the next treatment, or go over lab results. Although I review charts before I go into see a patient, there are a lot of details I want at my fingertips.

We did not want hardware in patient exam rooms for a lot of reasons. Although everything has multiple levels of passwords and is protected, you never know whether someone can get into your system. There's also the issue of damage—someone's child trying to play with the computer, too many people trying to look at it, or it falling off the shelf all worried me. Really, though, it was an issue of patient privacy and security, and we just didn't like the idea of leaving the system in a room where a patient may be waiting when we weren't physically in there. To me, it had the implications of leaving the prescription pad in a drawer in the room, which is something we just don't do.

The portability, I wouldn't do without it, but I would not buy a PC tablet without a connected keyboard . . . just a practical matter. You constantly need to type to find a record or put a patient's name in. If you have a PC tablet and you're sort of

hunting and pecking like one would with the palm, it's time-consuming and inconvenient.

HONI: What are some of the results of using the EMR?

Dr. Katzen: I feel my communication with outside physicians and the patients is absolutely more efficient. If a physician called me from another office about a patient, or the doctor called me from the emergency room, somebody had to put them on hold, go look for the chart. . . . And, again, is the chart in the file? Is the chart in typing? Is it in the areas where laboratory data is being added to it? Maybe 15 minutes later the chart would appear. Obviously, you can't keep a physician on the phone waiting that long, certainly not the emergency room physician. We were talking constantly to other physicians about patients we were treating and having them remind us who the patient was. Now, I pick up the phone and start typing the patient's name. I have the chart at my fingertips. This does wonders for my communication. With the ability to have the chart open, we can update information right as we get it. For example, if I'm on the phone with the radiologist to tell me a very significant result on an x-ray, I type that result right into the chart myself, so it will appear.

If a physician calls me about a new patient he is going to send to the office, I can type a note that is going to be a part of that chart. I've always written notes about new patients when a physician calls me, but it's always been on some scrap of paper that you hope finds its way into the chart. When the patient finally came to the office, either the next day or a week later, I'd hope the paper was there, but that wasn't always the case. With the new system, it's always there, so it's totally improved the efficiency.

One of the best things in terms of patient care is the on-call person can access our medical records system from home. I can have the patient's chart right in front of me. If I receive a call about someone who's febrile, I know what their blood count was yesterday, and I know what chemotherapy treatment they had and when they had it. I know whether I have to truly be worried about them being infected. Or I am able to discuss their pain management because I can look up exactly what medications they are taking and what we've prescribed. Sometimes someone will call and tell you what they are doing, but they may not be doing what was prescribed in the office. I can check the record immediately. I truly feel that it not only improves our efficiency and ability to communicate with other physicians but it definitely improves our care of the patients.

HONI: Have you seen any monetary benefits of using the EMR?

Dr. Katzen: First, eliminating paper in and of itself is a savings. For example, with the traditional fee tickets—the multipage three or four copy, NCR copy—a copy would go to the patient, a copy to the billing office, a copy to the front desk to do scheduling, and so forth. We don't pay that anymore because we don't use fee tickets. In a busy practice with five physicians, that saves us a significant amount of money.

The first part of implementation introduced electronic billing, which is point-of-care billing as opposed to our old system where we would circle something on the fee ticket. At the end of the day, the fee tickets would be transferred to the billing office, and the next morning, the billing office would go through fee tickets, post the charges, and so forth. If there were any problems—for example, a patient was seen but there was no office visit charge—by the next day I might be skeptical as to what level of office visit I did. Now, literally before the patient is out of the door, I've already billed them and it's on the screen of the billing office. We aren't losing any office visits.

Billing for the day is ready to be sent out at the end of the day. The billing presents itself to the insurance office instantaneously after we have entered it into the electronic portion of the chart.

We also have an infusion office that delivers our chemotherapy. Before we had this system, it would not be unusual to be reviewing the chart and writing the chemotherapy orders and suddenly remember other orders, such as growth factors were needed. For example, when reviewing the chart you might say, "Gee, that patient is anemic they may need one of the growth factors." I would call by intercom and say, "By the way, administer this as well." Sometimes things that weren't written wouldn't get billed. They can add up to significant amounts of money at the end of a week, a month, a year. That's not how we communicate anymore. I pick up my tablet, add the growth factor as an order, and once the nurse delivers it, it automatically becomes a billable item.

HONI: How do you see the EMR helping you as we head into 2005?

Dr. Katzen: We're worried about 2005. In the event Congress doesn't change the bill as written, we're at least positioned to be as efficient as we can and deliver very good quality of care. But I'm definitely very concerned about what has been planned in terms of the reductions in chemotherapy. This type of system is allowing us to move forward.

We didn't buy the system with the idea of firing current employees, but we did know the quality of the clerical people we needed would change. People would have to be able to work with the computer versus people who were pulling charts and punching holes in paper. What we found, however, is that there is definitely a difference in the rate of growth of clerical personnel. Prior to the installation of the EMR, our office manager wanted to hire four additional people. None of those people have had to be hired. That's a significant savings.

HONI: What would you recommend to other practices in a setting similar to yours?

Dr. Katzen: Do some research. A medical practice with multiple sites and multiple physicians is really a partnership of the physicians and the staff. I recommend involving staff from all levels—nursing, front desk, laboratory, billing—in the decision. I also recommend having demonstrations by several vendors. Get references. Talk to people who are using the system to find out whether the system really does what the salespeople say it does. Are there any problems that aren't so obvious from a sales demonstration?

WEST MICHIGAN CANCER CENTER (WMCC)



Terry McKay,
President and
CEO, WMCC

WMCC is a comprehensive cancer center in Kalamazoo, Mich. The center has medical oncology and radiation oncology services in the same four-story building.

It employs five medical oncologists, three radiation oncologists, three physicists, two dosimetrists, and eight radiation therapy technicians. On average, WMCC sees about 300 patients a day.

HONI: Why did you consider an EMR?

McKay: To be very honest, we're 10 years old this year. We set this paperless office goal for ourselves 10 years ago. That's how haughty we were in our thinking. I'm not sure that you are ever completely paperless, but it was a goal. We started to turn from a paper environment to a computer environment very early on. When we first opened, we were introduced to a scheduling system, and we saw the merits of that system in terms of being able to view both radiation and medical oncology therapy in the same program.

That was our first big toe into computerization. We, of course, had the record-and-verify system on the linear accelerators, which most people in radiation therapy are familiar with. Then we moved on. We really needed an electronic medical record so we could view on the screen, at any place in the building (we are four floors, 55,000 sq. feet), the latest dictation on a patient and any other information the medical oncologist, the nursing staff, or other caregiver might need without tracking down the chart.

To backtrack a little, I have to tell you that until this year, we had two separate charts—one for medical oncology and one for radiation oncology. Fifty percent of our patients are shared patients, so we have made a giant step this year in combining the chart. It was one more step into this lofty goal of being paperless.

Let me tell you about some of the other things we have put in over the years, such as the quality checklist. We use it internally to let everyone know what is going on with the patient: the way nurses enter the height, weight, etc, when they are bringing patients into the exam room. Now we're doing a test with our new chemotherapy suite; we're going to have wireless portable computers on rolling carts. The nurses can chart directly into the computers as they treat the patients.

This year we bought a new lab tracking system. As you know, patients in medical oncology particularly get labs done every week. I can't tell you how many times we chased down lab results before we bought this system. That has been a huge help in our efficiency, because we have the lab values immediately on the screen when physicians are going upstairs to see the patients.

Because of the impending cutbacks for drug reimbursement, and reimbursement being under attack in general, we're now in a position where that we must rely on technology. I think it's always a hard question for an organization to say that it needs to invest x number of dollars in technology while it's

losing reimbursement. Does that make sense? The answer is yes, or at least my answer is. I don't see the reimbursement picture changing much, and the only way to counter that is to streamline how you deliver care to cancer patients. Especially if you are not going to be selective in terms of which patients you treat, you must be much more efficient, and technology is going to help do that.

Another aspect is that carriers, the third-party payers who reimburse us, are now looking or are going to be looking at our clinical outcomes. You may find that if you have better outcomes, you get better reimbursements. This seems to be the latest movement in the reimbursement world. If you don't track good data, if you don't have an engine to analyze your data, it's going to be a very onerous task for you to review all of your charts and produce your outcomes and then compare your outcomes regionally and locally. In my personal opinion, I don't think we're going to survive and render good cancer care to all patients without the aid of technology.

HONI: What research did you do to decide on a vendor.

McKay: I knew about a vendor from years and years ago. Prior to coming to Michigan, I knew the principals because they were connected to a company that sells linear accelerators. They cut their teeth in radiation therapy as I did, so they were very familiar with radiation therapy. When we first opened the cancer center, the hospital that owns our cancer center introduced to us their computerized scheduling system. That caused my very competent and caring staff a lot of anxiety because it just simply didn't work in an outpatient environment. We threw up our hands and were literally booking patients' appointments manually. We had two linear accelerators here at the cancer center, and they had a record-and-verify program that was really a product of our vendor. I was reintroduced to the vendor's product. When we were trying figure out our scheduling nightmare, and what was the best product to adopt, I got advice from one of the hospital's IT people. He looked at this vendor's scheduling program and said, you know, I think this will work for you. I said, no, it will not work for me. It might work in radiation therapy beautifully, but it will not work in medical oncology. It's a lot more complicated. There are a lot of other things going on. Radiation therapy, on the other hand, is pretty straightforward. In fact, the program was developed in radiation oncology and will not work in medical oncology said I. He said, "No, I really think it will work."

I got all the people involved together and said, look at this system and let me know what you think. They came back and said they thought it would work. So over a weekend in June, they all came in and converted the paper scheduling appointments into the new system. I have to say that it worked very easily. It was a very easy conversion.

That initial entry with the scheduling system was our introduction, but it moved us forward. We now have a 10-year relationship with the vendor and have been alpha and beta testing sites for them. I like to think that we have some responsibility for moving them fast and hard into the medical oncology arena. Now I have pushed them to track our clinical

outcomes using the EMR and develop clinical outcomes for other centers that use this vendor's EMR. In fact, just recently, I made a presentation to a group of cancer centers around the country. Our vendor was there offering to be the technology partner. We're getting together this summer to iron out a few things for a preliminary presentation this fall about comparative clinical outcomes.

HONI: You have brought up involving your staff several times. How important is involving your staff to implement an EMR?

McKay: It would never happen if it weren't for the staff. I have a director of nursing and a medical oncology physician, and those two individuals are absolutely responsible for all the progress we have made with the EMR for medical oncology. If both of them had more time to devote to moving this along further, we would be a lot further along. For example, these visionaries see the queing from service to service situations. Remember, we are a comprehensive cancer center so we have 250 to 325 patients coming in any given day for different things. We have battled back and forth about the queing system. It took three of them to say it can work, just gut it out for two weeks. They're making it work. If they aren't involved in the process and they don't have some say about it, you're going to have a hard time inspiring them to use it. I'm in the position where I can lay out a goal or a vision, and say this is what we have to do because it will make us more efficient and allow us to streamline cancer care to survive. But they're the ones who actually use the applications. They have to believe in the applications, and they have to have a voice in choosing the applications. Even though I think they all realize it isn't going to be perfect, it's going to meet most of their needs and, through revisions, it will meet more and more of their needs because they will have input on what other changes are needed.

HONI: So it's not a process where you are one day finished; it's a continuous improvement process.

McKay: Absolutely. We just went through one of the major revisions. The vendors tweaked the software based on suggestions from users.

HONI: How do you train people to use the new programs or revisions?

McKay: When we implemented the billing program, that was a major deal, so I sent two of our managers to the vendor's main office to be trained. The vendor also came here for two weeks to train our staff on this system. We've done the same thing with the EMR. We had the vendor come here for training and blocked out time for our nurses and physicians to get familiarized with the system. With the lab system, we sent one of our lab personnel to training prior to implementation, and just this week, we sent her for more training. The idea is that she will come back and train everyone else. Training is key. The other thing is we have our own information systems (IS) people, and they have been trained in all of our systems. It's from an IS perspective, not from a user perspective, but it's enough to help them figure out some of the glitches. We have the advantage of having that backbone of computer sup-

port. And, of course, you can call the vendor.

HONI: What have been the results of using these systems?

McKay: There are pockets of us who never call for a chart of medical records. Never. We'll go on the computer and look up whatever we want to know. That saves maybe one FTE in medical records. We're not pulling as many charts. We are relying on what we see on the computer.

We haven't made the big jump to where the physicians don't use the chart at all because they have to have that chart to walk into the room. However, the physicians, well most of them, will use the EMR if a patient calls and they need to check the patient's last follow-up and what might be going on with that patient.

Because we share 50% of patients in radiation therapy and medical oncology, both specialists, and they do this frequently, will look up to see if they've seen the patient yet in radiation therapy and what they've planned. That very patient may be being seen in medical oncology that same week for something else. Sometimes they get simultaneous concomitant radiation therapy and chemotherapy. They can look up and see that doctor so-and-so saw the patient and he or she is planning six weeks of radiation therapy or whatever it is. That's instantaneous. They just access their patient records; they don't need to pull the radiation therapy chart, etc.

The lab portion of the program has saved us an incredible amount of duplication of paperwork. Labs are so important to medical oncology. We used to be fearful that the lab work would not be in the chart when the doctor went to see that patient. We sometimes went into overdrive and had two or three copies of the same blood results on that patient. And if you do that with 25 cents a copy, that's 75 cents for each patient. And we see 80 to 100 patients in medical oncology every day. Now we don't do that because we have it in the computer. Every exam room has a computer, and every patient is brought up when they are put in a room. We enter their height, weight, and temperature—their vitals. The doctors can go right to the screen and look up whatever they want: the lab work, any x-rays or CTs that have been done on the patient, and the last dictation. Or they'll have the medical record that they can look at as well.

HONI: It's interesting that you mention that the doctors still seem to like to carry the chart. Do you think this is a psychological thing?

McKay: Yes, I do. I have a major push right now in radiation therapy to have no more paper charts for the linear accelerators. There's no reason for it. It's a major push to convert the radiation therapy machines to paperless. It's all in the computer anyway. Next, we'll start on radiation therapy doctors. I think the chart is security to them, to some extent. Sometimes if you offer new technology, if it's the latest and greatest, you can get them enticed. What we are trying to do is go wireless here. As I mentioned, we are trying it in chemotherapy first for the nurse with the portable wireless laptops on the little carts. If that is successful, then we'll try to get the physicians their own laptops that they can carry around wherever they want and have the docking station at their desk. If it's wireless, I think they are going to be inclined

to use the environment more.

You're always going to have some who won't budge. If you can give them the hard technology and the soft technology so they don't need to dictate a two-page office visit or consult, they'll be more willing to come on board. We do have a lot of templates, but if we start to populate those templates with a few automatic keystrokes, we may be very successful in having the physicians handle a lot of their dictation almost immediately, documenting whatever happened in the office visit or consult. It may work better in some specialties than others, and it may work better with some doctors than others. I think, from a physician's point of view, you have to assure them of the accuracy, and you have to demonstrate that you are saving them time and effort. If you can do those things, they will feel comfortable pursuing it. If it only shifts the burden from a secretary or nurse back to them, it's not going to work. They have to see a real benefit for saving themselves time.

HONI: What are some lessons you have learned that you could pass on to other comprehensive cancer centers considering an EMR?

McKay: You just gotta do it. Talking about it and delaying it just puts you more and more behind the 8-ball. You need to make up your mind that it's the right thing for your center, that you are going to streamline your care, and that you're going to have access to the information you need with much more rapidity. It is not going to happen overnight. And it is not plug and play. Your whole organization needs to make a commitment that you're going to embrace it. It's a journey, and it will take time. If you're successful, you'll probably never reach the destination because you and the vendor should continuously improve and perfect this technology and the software. Your successes are going to be there. Your trials are certainly going to be there. You should celebrate your successes and remember that the glory is in the outcome and not the process.

HONI: And you see this as very important as the reimbursement world is changing?

McKay: I don't see how you can survive without it. If you don't maximize your time and effort, I don't see how you'll have enough dollars to pay for the staff you must have to treat these patients. You need to be a lot more efficient doing what you are doing. ■

