Selling Physicians on EHRs: Illustrating the Benefits to Care, the Importance of Data

by Chris Dimick

For physicians trained to see the medical record as an archive, maximizing EHR potential comes in using it as a tool to improve care.

When it comes to implementing electronic health record (EHR) systems, physicians in small practices have an abundance of deterrents. Cost is one; disruption is another. Mindset can be a third.

Many physicians are set in their ways, notes Richard Baron, MD, president of Greenhouse Internists in Philadelphia, PA. They have practiced medicine with the paper chart for years and may not see the immediate benefit of disrupting their workflow to use a computer.

Baron, an advocate of health IT, is not one of them. He says HIM professionals and others can help change attitudes by understanding and illustrating how EHRs can benefit physicians by creating efficiencies and providing direct opportunities to improve care.

Achieving these benefits may require another potential change in physician mindset—seeing data collection as a part of providing care, not apart from it.

More Than an Archive

Changing mindset begins with seeing an electronic health record as more than a static file, a simple repository for information.

"Doctors are trained to look at records as being mainly archival," Baron says. "You create this record that somebody else is going to use. You are going to get paid based on it, you need it for when you get sued to show the care that you gave. You are going to use it some, but you are just going to look stuff up when you need it."

Doctors may need examples of how EHRs can be tools that help them extend their work. They may need to be convinced that EHRs don't make work—when used correctly they can create efficiencies.

The key is the data, Baron says. He advocates to his peers that the secret to making an EHR work for them is how they input the data.

If information is input correctly once, it can be used many times over. That's something never possible with a paper chart. "The core thing you want to do is give the doctors a stake in the integrity of the data," Baron says. "You do that by having them use the data in a way that helps them practice."

Baron's four-physician internal medicine practice shed paper records and the file room and implemented an EHR system in 2004. He says the EHR has improved the way he practices medicine "enormously."

The ability to share information instantly has made the practice more effective. When the practice was paper-based, for example, Baron might have had a phone conversation with a patient and written down notes on a piece of paper. If the patient called back and spoke to another physician before Baron shared the details of that conversation with his colleagues, the second doctor would have no knowledge of the previous call. With the EHR, Baron types conversation notes directly into the patient's chart, giving all staff access to the information.

Sharing charts is no longer a problem as well. Where he was once hesitant to hand off a sick patient's chart to a medical assistant for want of having it close at hand for analysis, now multiple people in his office can access the electronic medical chart at the same time.

Project Mammogram: Capturing Quality Data for Quality Care

Greenhouse Internists learned firsthand the importance of good data capture during a population health improvement project they called Project Mammogram.

Eighteen months after the implementation of their EHR, Baron and his staff were ready to see what the system could do. They wanted to improve mammogram screening rates among their patients and assumed it would be "simple" to use their system to find out what percentage of women patients between the ages of 50 and 65 had received a mammogram.

Once that percentage was determined and the patients sorted, Greenhouse's staff would use the results to encourage those women identified as not having had a mammogram to get the test. They would then run the report again later and see if the percentage rate had improved based on their efforts.

The first report they ran was to determine all women aged 50–65 who attended the practice—the study's denominator. The second report ran through the files to find those women with a mammogram on record—the study's numerator. The report identified 1,582 female patients aged 50–65, of whom 807 had mammograms recorded. This showed that only 51 percent of at-risk Greenhouse patients had been screened. The report took less than five minutes.

Easy? Yes.

Accurate? Not at all, Baron says.

The results were "disappointingly low," to the point that Baron and his colleagues suspected the study was inaccurate. To be sure, Greenhouse staff took months calling each of the women identified as not having had a mammogram and asked them if they had been tested.

The Roots of the Problem

While making their calls, Baron and his staff realized what went wrong. Poor communication standards between providers and faulty in-house data practices were the culprits. As a result, Greenhouse staff found that many women in the study group had received mammograms, but the tests were not reported to Greenhouse Internists by outside practitioners. Worse yet, Baron says, in other instances Greenhouse did receive the information but did not record it so that it could be easily culled later.

Prior to the study, physicians would electronically sign a patient's mammogram document to show it had been reviewed. It would then go into the system, supposedly as structured data. That action took one mouse click. "We thought, 'All I have to do is sign it and, boy, isn't that easy,'" recalls Baron. "But to get it in the chart as structured data you have to do 12 mouse clicks. The result was that we didn't have the data in a form we could use."

To further throw off the study, the original denominator included people who were dead and patients that had left Greenhouse. Once the corrected amounts were established and entered into the study, the mammogram rate changed significantly. The new rate showed 922 women had received mammograms out of 1,402 at-risk women—66 percent. After encouraging those women who had not been tested, the rate improved to 76 percent.

Greenhouse learned a good lesson about the importance of inputting data to maximize EHR benefits. It's the type of insight about data quality that HIM professionals are well suited to bring to EHR implementations.

Baron says the experience also made him realize that there will always be unstructured data that he will want in structured form. Like most doctors, he says he will have to decide what data are worth structuring and then either do it himself—all 12 mouse clicks in the case of mammograms—or assign it to an existing or even a new staff member.

In the absence of standards for structuring and exchanging test results, capturing some data in its most useful form will not be simple, Baron notes.

"It made me realize that structuring data is an ongoing problem in the office, and it was one that I could either be crushed by or try to redesign my workflow so someone else could help me do it," he says.

A Tool for Improving Care

Efficiency is a draw, but an EHR's main selling point for most doctors is its potential to directly improve patient care and measure the quality of patient service. How data are input into the record is just as important here.

Simply installing an EHR is not enough, Baron says, and doctors must understand the key to a useful system comes down to how data are entered and stored. Physicians often resist efforts to standardize and structure data collection, preferring free-text notes to structured pick-lists. Free text often offers greater detail than structured text. There are other instances, however, when structured text enables some of an EHR's most powerful features for improving patient care.

For example, physicians at Greenhouse Internists record each patient's sex, age, and smoking status. In the past, Baron would have written this information on the patient's paper chart; now he enters it into the EHR as structured data. For smoking status, he chooses from one of three descriptions: smokes now, former smoker, or never smoked.

That matters down the road when the practice wants to identify patients by smoking status. Baron uses the example of a report from the US Preventive Services Task Force recommending that men aged 65 to 75 who have ever smoked should receive a screening test for abdominal aortic aneurysm.

In a paper record or an EHR where smoking status was recorded in free, unstructured text, physicians likely wouldn't have time to sort through the records and identify each male patient aged 65 to 75 who ever smoked. The Greenhouse EHR system, however, "knows who's a man and a woman, who's between 65 and 75, and knows if they ever smoked," Baron says.

Because those data were entered in a structured way, the patients would be easy to identify. A common situation such as this can be a powerful example of how an EHR and considered data collection can be a tool for improving patient care.

One Goal—Better Healthcare

Baron's EHR system provides more opportunities for data analysis than his staff has time to conduct. "We are drowning in a sea of data opportunities," he says. But that is better than not having easily accessible data to analyze at all. After all, Baron notes, aggregating and analyzing patient information is part of his job.

"It is my job when I see patients to aggregate complex clinical data about them and interpret that for their benefit," he says. "And once I am in the electronic environment, the more structured those data are the easier they are to aggregate and manipulate."

Getting doctors to the point of implementing an EHR could be helped by "a health information professional willing to explain the benefits," Baron says. That discussion would be a meeting of two different mindsets with one goal—better healthcare. "The doctor knows what they need clinically, and so if the doctor and an information professional talk together about how to achieve that goal, then doctors are going to have better ideas about what an EHR system can do for them."

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