

The Problem With EMRs

A White Paper

By: Kishore Tipirneni, MD

Answering the Question: Why EMR's Fail

A Practical and Pragmatic Approach

The Problem with EMR's

-- Why EMR's Fail --

Electronic Medical Records (EMR's) have been around in some form or other for over 15 years, but less than 15% of the medical practices in the country have adopted them. Even among that 15%, many are unhappy with their EMR's and some have even switched back to a paper chart system. Why even after prodding from the government, including President Bush himself, is the adoption of EMR's so minimal? Why are so many physicians still in the "horse & buggy days," as President Bush puts it, of paper charts?

I think that the answer to this is that most physicians feel that the right type of EMR is not available yet. To understand what I mean by this, one must have an understanding of how a medical practice works and what an EMR system is meant to replace – a paper chart. A medical practice generates revenue when the physicians see patients and then bill insurance companies for these services. The more efficiently a physician is able to see patients, the more revenue a physician can generate. From the gross revenue that is generated, by the physician, the overhead and costs of running the practice are deducted (typically 40-60% of the gross revenue), and the remaining amount becomes the physician's salary.

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For the physician, the paper chart is a very efficient method for seeing patients in a clinic – one that has been around for a hundred years. When seeing a patient, a physician can simply pick up a paper chart outside a patient's exam room, glance through it to refresh their memory on the patient and their problems, and go in and see the patient. While in the room with the patient, all information about the patient is literally at their fingertips, and if the physician needs to document new information about the patient, they can simply write on the paper chart. After the patient visit, the physician can simply put down the chart and pick up the chart on the next patient. The paper chart system allows for very quick retrieval and documentation of information and therefore allows the physician to see a good number of patients per unit time and thereby allows the clinic to run efficiently.

The downside to a paper chart is mostly for the staff working in the office. There needs to be people employed in order to handle and maintain the chart. This includes, preparing new charts for new patients, filing documents into charts, and filing the charts themselves in a filing system. The other disadvantage for the staff is that only one person can access the chart at a time. Frequently, the chart is not found in the filing system perhaps because someone else is using it and a lot of time is wasted by the staff looking for charts. This inefficiency of a paper chart for the office staff results in increased overhead for the practice in the form of increased employee costs. But this increased overhead is easily justified by the practice since it allows the physician to be more efficient in the clinic thereby generating increased revenue.

Let's take a look at what happens when a typical EMR is introduced into this paper chart clinic. First, there may be a relatively large cost associated with purchasing an EMR system for the practice. This in itself is not a problem as long as this cost can be justified with either increased production or decreased overhead in the future. Most EMR's are very different than a paper chart. They are accessed via a computer, and the structure of the program is such that a not only the staff, but also the physicians have to undergo extensive training on how to use the EMR. During this training process, the physician is very much hindered in clinic and is unable to see the same number of patients they could with a paper chart. Worse yet is that many older physicians who may not be very tech savvy, will have a much longer training period, or may not even be willing to adopt the EMR at all. For many EMR's, this implementation phase may last years during which time, the practice has increased overhead and decreased productivity of the physicians. Even after the implementation phase of an EMR, many physicians say that they still cannot see the same number of patients they could with a paper chart because the task of dealing with the EMR slows them down.

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For new patients in a paper chart system, the task of entering information such as past medical history, family history, and review of systems, is usually accomplished by the patient. We all know that whenever we go to a physician's office for the first time, we must fill out extensive paperwork prior to being seen. This paperwork is then attached to a paper chart. Although a nurse may review

and modify this information prior to placing it in the chart, the bulk of the work of entering this information was done by the patient requiring very little labor from the practice. On EMR systems, this information must be manually entered

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by either a staff member or the physician. Now the practice has taken on an additional responsibility that was not there previously. If a staff member is tasked with entering this data, the practice will have to hire more staff, increasing overhead. If it is the physician entering this data, then this will increase the time the physician will need to see each patient thereby reducing productivity.

Another problem is that physicians practice medicine in different ways. Even two physicians from the same specialty in the same practice can have vastly different practice styles they are accustomed to. Most EMR’s force physicians to practice in only one way causing frustration and impatience. Many physicians have told me that after going on an EMR, much of their time in clinic is spent typing, or entering data into the EMR rather than seeing and treating patients which is what they were accustomed to under a paper chart. Many have also told me that they are unable to see the same number of patients they could when they were under a paper chart system.

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Another problem with EMR’s is a problem with interfacing with outside clinics and medical systems. Paper in the form of faxes or mail is the only universal communication method in medicine. If a practice wants to make sure that their EMR can interface with all external medical sources such as labs and other physician offices, it must be able to handle paper in the form of incoming and outgoing faxes and mail. Most EMR’s are very poor at handling paper and some don’t handle it at all requiring the practice to still keep a paper chart on each patient. In this situation, not only has the practice lost one of the main benefits of the EMR, medical records are actually made more complex by having some information stored in the EMR and some stored in a paper chart.

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Another problem with EMR's is obsolescence. The field of EMR's is closely tied to the computer industry. EMR technology is changing rapidly, and just like the PC that someone bought 3-4 years ago is made obsolete by today's PCs, today's EMR's will also be obsolete in short periods of time. This means that the EMR that a practice spends much time any money on implementing may be obsolete by the time that the practice is fully implemented and using it.

I have spoken to many practices that have implemented an EMR and the stories are all very similar. In a typical example, a practice of 10 physicians decided to implement an EMR. Prior to implementing the EMR in this specialty clinic, each physician could see about 40 patients per full day of clinic. The average dollar

amount collected for each patient was \$100, and each physician was in clinic about 3 full days per week. Assuming 4 weeks per month, each physician was generating \$48,000 of revenue per month (\$100 x 40 patient x 3 days x 4 weeks). The initial cost of acquiring the EMR for this practice was \$200,000. The implementation phase for this practice took about 1 1/2 years over which time, the physicians had to have help in training the physicians and staff spent an addition \$150,000 in training and support costs from the manufacturer of the EMR. During the implementation phase, three distinct groups of physicians emerged. The more tech savvy physicians, through much effort, were able to be fully implemented in 6-9 months. Another group of physicians who were very frustrated with the data entry required by the EMR decided to hire an additional employee to do the data entry for them. The third group of physicians could not tolerate the training and implementation and refused to use the EMR altogether. At the end of the 1 1/2 years, the practice had directly spent \$350,000,

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had 6 out of 10 physicians using the EMR, and had increased the number of employees in the practice. None of the physicians using the EMR were seeing the same number of patients that they were under the paper chart system. On average, each physician was seeing only 35 patients for full day of clinic. This resulted in lost revenue of \$432,000 per year (\$100 x 5 patients x 3 days x 4 weeks x 12 months x 6 physicians). As one can see, the total cost of the EMR for the practice including acquisition, implementation, increased overhead and lost revenue was approaching \$1,000,000 for what seemed like a \$200,000 EMR. Although the practice did decrease their cost of transcription and had more accurate billing of office visit charges, these improvements did not come close to making up for the loss of productivity and increased overhead. How can a group of very intelligent people such as 10 physicians make such a colossal mistake? The problem is that this practice evaluated prospective EMR's based mostly on the features they contained instead of how their productivity and overhead will be affected.

Most physicians are not so naive. Most understand the limitations and shortcomings of today's EMR and have chosen not to make the switch from a paper chart to an EMR hence the small adoption rate we currently see among physicians. But the environment is changing. The next generation of EMR's is now emerging and has learned from the failures of the past. These EMR's have implementation times of days, not years. They actually increase physician productivity not decrease it. They are highly customizable to adapt to any physician's practice style and can interact seamlessly with the paper world. They have tackled the issue of obsolescence with providing for updates as part of their pricing structure. The early adopters of these EMR's have been extremely satisfied because of the greatly increased revenue and decreased overhead associated with them. I think that given these new products, we will see more and more practices going digital with EMR's.

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