Commitment to success, engagement from all concerned and a shared interest in continuing improvement can take you far.

SUCCESSFUL EHR IMPLEMENTATIONS:

ATTITUDE IS EVERYTHING

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Previously I wrote a "how-to" article describing how to achieve a successful electronic health record (EHR) implementation.[1] I sorted the dos and don'ts of implementation into three categories that I called *team, tactics* and *technology*, and focused on the teamwork, knowledge and skills needed to succeed. I still find that paradigm useful.

In the past few years, however, I've been able to observe a number of EHR implementations around the country. In addition to my full-time family medicine practice, I work as an IT medical director for a large primary care group in Arizona that to date has implemented an EHR in 23 unique office practices. Previously I consulted for the now inactive DOQ-IT (Doctor's Office Quality Information Technology) program, which was designed to help small practices select and implement EHRs, and I now consult independently around the country on new and troubled EHR implementations.

The new lesson I've learned is this: *Attitude matters.* A lot. It may not quite be "everything," but the right attitude will help bring you far on your EHR journey.

Defining success

Implementing an ambulatory EHR is a complex, challenging process. One can surf the Internet and find poorly substantiated claims that anywhere from 10 percent to 50 percent of EHR implementations fail. Often these claims are purely speculative, are based on events that occurred many years ago or really refer to inpatient EHR failures. Limited research has been done in this area, and what has been done has been poorly designed.

My opinion, based on observation and conversation with others involved in health IT, is that ambulatory EHR implementation failures, as defined by never using or ceasing to use *all* of the purchased software, are quite unusual. On the other hand, not fully using purchased ambulatory EHR functionalities, or using them ineffectively or inefficiently, is quite common. I've observed sites that still have paper charts after years of being on an EHR, despite having scanning capability. I've seen sites where some doctors use all the functions of an advanced,

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comprehensive EHR effectively, while their partners refuse to do anything on it but review data. I've seen sites where even active problem lists aren't completed, much less past medical, surgical, family or social history lists. To my surprise, I've seen e-prescribers who don't bother to update or complete their medication lists. And frequently, I've seen sites where health maintenance functionality is ignored.

These commissions and omissions do not necessarily mean that an EHR implementation has failed, but they do mean that the EHR ends up not being used anywhere close to its maximal effectiveness. They are what can be called "partial implementations" rather than successful ones.

Principles of success – the fivefold path

Buddhism may have an eightfold path, but the path to EHR nirvana (or *contentment*, at least) is only fivefold. So the good news is that it's easier to successfully implement an EHR than to become a Buddhist monk. The first three elements on the EHR path are really attitudes – full **commitment**, extensive **engagement** and the desire to see continual **improvement**. The fourth element is having the necessary **resources**. The fifth element is having the requisite **knowledge**.

With regard to the first three elements, not only must your implementation team and organization leadership share these attitudes, but you must also be able to promote them throughout your organization.

Commitment

Commitment means the willingness to invest the time and money needed to make the implementation successful – to do whatever it takes. Doing so really needs to be viewed as a long-term investment. Fortunately it's an investment that will likely pay bountiful dividends if done well.

As a successful implementer, you will need to commit adequate capital both for quality software and hardware. You will need to commit to spending a lot of time planning every step of the process. And you will need to commit to adequate training – both initial and ongoing – which costs both time and money. Too often practices skimp on initial training, leaving users with limited skills. Even more often, practices offer no ongoing training, not realizing that the skills to become expert rarely come after just two, four or even eight hours of initial training.

Why are successful implementers committed? Hopefully it's not just because they fear failure. I suspect that they truly believe that their EHR will fundamentally improve the quality of the care they provide and the efficiency of their practice.

If you are unconvinced of that and aren't sure the effort is worth it, I encourage you to pause. Seek out leaders of successful implementations and see what they've done and how their practices are running. Hopefully that will inspire you.

Engagement

Many implementations suffer from a lack of end-user engagement, particularly physician engagement. The implementation process is viewed as a burden, and physicians typically want to delegate it to their administrative staff. That may seem reasonable. Physicians should focus on seeing patients, after all. But this isn't financial software. It affects every aspect of how physicians practice their craft, and if they aren't involved in the selection and configuration of the software, they are likely

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to resist and resent the behavior changes the software demands. Plus the decisions made in selection, setup and new workflow design are likely to be of lower quality than they should be, absent input from physicians and other end users.

Clinical staff members tend to follow the example of the physicians with whom they work. If physician engagement is low, staff engagement will likely suffer as well.

You can increase engagement several ways. First, insist on involvement of your end users, especially the physicians, from the start of the implementation or, better, from the start of the software selection process. Second, offer frequent, informative and even repetitive communication. Third, through your communications, help people set reasonable expectations. Finally, conduct your decision-making process in a fair and open manner.

Improvement

Those who implement EHR systems successfully believe that whatever they are doing now can be improved. They aren't satisfied with the status quo, and they desire to try new things – if it will help them achieve their aims. They are flexible, and although they may not like change, they accept it as necessity. Put in management lingo, folks with this attitude are believers in and practitioners of continuous quality improvement. I'm not sure how people acquire this attitude, but if you believe that your practice is as good as it can get, I challenge you to look deeper.

Resources

Three resources are critical – quality software, strong vendor support and a sound techni-

cal environment. Yes, there is a difference in quality between various EHR products. And, yes, some vendors provide better support than others. So take your time during the selection process. It can make a large difference. Likewise, be sure you've invested in appropriate hardware, bandwidth and technical support. If you've outsourced the technology component of your EHR by using an ASP (application services provider) or SaaS (software as a service) arrangement, make sure that the vendor you hired has a proven track record for high network availability and responsiveness in correcting technical glitches.

Knowledge

Knowledge is important, but the easiest of the five elements to acquire. Your vendor should be a key resource. Pay close attention to the vendor's advice about what it takes to implement the system successfully. After all, the vendor has seen lots of implementations. You will probably see only one. You may also find the implementation article that I wrote in 2007 helpful.[1]

An acronym to remember

Here's an acronym that might help you remember the five principles of a successful EHR implementation. CRIKE. (Imagine that you are in the northern reaches of Australia and unexpectedly encounter a ravenous, twelve-foot crocodile. You start to say "CRIKEY, MATE" – but just don't have time to finish.) Remember: **C**ommitment, **R**esources, **I**mprovement, **K**nowledge and **E**ngagement.

Successful implementation is a moving target. Once you master one set of functionalities and workflows, new ones are likely to come along. Having strong individual and organizational commitment, end-user engagement, desire to improve, resources and knowledge will help lead you to turn your EHR into an awesome, indispensible tool that helps you do what you do best: take care of patients. **FPM**

Send comments to **fpmedit@aafp.org.**

1. Adler KG. How to successfully navigate your EHR implementation. *Fam Pract Manag.* February 2007:33-39. http://www.aafp.org/fpm/2007/0200/p33.html. Accessed Sept. 5, 2010.

About the Author

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■ Successful implementations are marked by a shared belief in continuous quality improvement.

■ Naturally, success also depends on having well-chosen software, good support, adequate hardware and appropriate technical infrastructure.

■ For success, one also needs to know enough to pick the right EHR system and implement it fully. Knowledge, though, is the element of success that is easiest to acquire.