

# What Physicians Want in an EHR: Physician Practices have been Ignored by Health IT Vendors—Until Now

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By Blair Butterfield

Physician practices have made great strides in the last several years toward adopting EHRs, but even in the era of the HITECH Act and the “meaningful use” EHR Incentive Program, a large percentage of practices continue to drag their feet. Cost is certainly a factor for many practices, as is the “hassle” factor of installing and learning a new system. But the problem actually goes much deeper than these surface issues. Research, including a study conducted by the Mayo Clinic, points to the conclusion that vendors are simply not producing EHR systems that physician practices want to use.

Community physician practices are arguably the largest and most important segment of the US healthcare system. Most providers work in practices, and patients get most of their care at the practice level. There are also the critical-and very large-specialty areas that typically operate in the practice setting, such as dentists and behavioral health professionals. Numerous studies have shown the positive impact EHRs can have on outcomes when used properly in hospitals, clinics, and practices. And keeping up with the constant flood of new clinical guidelines, best practices, and billing and reporting requirements creates a very clear need for tools that give clinicians access to the latest clinical content and operational requirements.

Some argue that the health IT industry has overlooked this foundational layer of the US health infrastructure that has such a clear need for EHR technology-or at least has not produced specialized health IT that is appropriate for physician use. A review of the evolution of the EHR, and the ambulatory EHR in particular, shows several reasons why practices are not finding the right EHR systems that meet their specific needs. Research has provided some very useful insights into what is missing from today’s EHRs when it comes to the still very large percentage of doctors and other clinicians who work in practices.

However, the good news is that progress is being made on bringing better systems to market, and the next generation functionality set for practice EHRs has many in the healthcare industry excited. The health information management (HIM) community will play a critical role in helping practices transition from paper to digital systems and respond to the growing demand for electronic reporting and compliance requirements.

## Mayo Clinic Research Study

A recent research study conducted by the Mayo Clinic shadowed physicians and their clinical staff at practices in various stages of EHR implementation-from paper-based charts to complete EHR adoption-to determine how physicians work, communicate, and interact with EHR and health IT systems. The study was conducted in 2010 at three practices:

1. A medical center in Minnesota with five family medicine physicians and one assistant
2. A clinic in Iowa with six family medicine physicians and two internal medicine physicians
3. A clinic based in Wisconsin with nine family medicine physicians and two internal medicine physicians

The study concluded that every practice-and every practice’s clinician-works differently with the EHR. Each professional has developed their own work style to effectively manage their workload and ensure high quality care and efficient operations are provided. This was a good thing in the eyes of the physicians, as they felt they had developed a smooth workflow. But it means complications for the EHR vendors as they try to accommodate varying workflows.

The researchers found that in order to increase EHR adoption in practices, vendors need to include specific features and functionality, including:

- A flexible, customizable virtual workspace
- Workflows that closely mimic the paper-based processes and communications of clinicians

- Intuitive, easy-to-use interfaces and functionality; something anyone could pick-up, figure out, and start using right away at a basic level with little or no training
- The ability to work on tablets, laptops, and desktops
- Mobile capabilities to support an “on the go” work style
- Integrated clinical guidance and content from trusted, credible sources

Over the course of the past year, some EHR products have come to market that cover a few of the important requirements called for by the Mayo Clinic study. But there are practically no products available today that do all of them well.

## History of Leaving Practices Behind

EHRs designed for the practice setting are a relatively recent phenomenon in an EHR industry that traces its roots back to NASA and the pioneering work of engineers and a few adventurous hospitals in the 1960s and early 1970s. From that time through the 1980s, as commercial vendors acquired or developed computerized physician order entry (CPOE), lab systems, and other elements that we now think of as part of the EHR, the emphasis was entirely placed on the hospital setting.

Processing power and memory were costly, and it was only feasible for large organizations to purchase the mainframe (and later mini-) computers required. As the number of commercial health IT vendors exploded over the next two decades in the 1990s and 2000s, the focus still remained on the hospital. Even as processing power grew cheaper and programming improved, hospitals and large practice systems still dominated because the cost of sales needed for vendors to reach and support tens of thousands of practices was financially prohibitive.

Today there is finally more focus on the practice setting for a number of reasons, including the fact that the hospital system markets are saturated, and new national initiatives like accountable care organizations and health information exchange (HIE) connectivity are making it essential to integrate hospitals and hospital systems with community practices. However, up until the last few years, the health IT systems being offered to practices were basically adapted versions of the systems used in hospitals, which simply did not translate and scale down effectively for practices.

## Traditional EHRs a Poor Fit for Most Practices

Traditional EHRs are based on client-server technology that is a poor fit for the standalone work stations common in physician and specialty practices. More fundamentally, hospital systems were designed to support providers operating primarily in a rounding, bedside care mode who could be extensively trained on the system. Practice providers are always multi-tasking and wearing many hats, and typically are not amenable to systems that are training- and IT support-intensive.

Additionally cost has been a major barrier to physician adoption. A \$75,000 price tag is still not unusual for a practice to purchase and implement an EHR, and that has a huge impact on the cash flow of practices that can already be operating on razor-thin margins. Adding in the ongoing maintenance costs for software and hardware, and the lack of dedicated IT staff in practices that need to be contracted, EHR adoption has been financially and operationally beyond the reach of the average practice. The HITECH Act incentives, including the Centers for Medicare and Medicaid Services’ meaningful use EHR Incentive Program, have helped some physicians overcome this barrier. But for many practices the dollars and cents still do not work out, and they have decided to delay EHR implementation until the CMS penalties-the flip side of the incentive program-are implemented in 2015 and become too steep to bear.

## Next Evolution of the Practice EHR

Practice-based providers, and the EHR vendors that serve them, are beginning to recognize that technology and cost are becoming much less of a barrier to health IT implementation. Two technology trends are largely responsible for this change:

1. **Cloud-based computing.** EHRs delivered in a Software as a Service (SaaS) mode eliminate the cost of server infrastructure and maintenance, and the large upfront investment in licenses. Providers have become increasingly comfortable with the security and availability of such systems.
2. **Smart mobile platforms available everywhere.** Great mobile platforms like the iPad and smartphones are ubiquitous and comfortable for providers to use. They are seen as things that make life easier, both in terms of accessibility as well as ease-of-use, and can be integrated into health IT platforms.

These two trends, combined with useful functionality and content like embedded clinical guidelines, risk identification algorithms, and care compliance alerting, are making a new generation of EHRs not just tolerable but actually attractive for providers in practices. The advent of EHRs that doctors want to pick up and use marks a fundamental shift in EHR adoption.

As that shift takes place, vendors and health IT advocates hope EHRs will become much more widespread—not just in general medicine, but in specialties as well. When EHRs are affordable, easy to use, and very good at sharing data, then every practice will use one and new horizons of quality, prevention, and population health will be possible. Truly holistic models of care become practical when it is not just a patient's local hospital and primary care physician sharing data, but their OB/GYN, cardiologist, dentist, and optometrist collaborating on care as well. Also, as the nascent reporting initiatives of meaningful use expand, health systems and state and federal entities will be able to crunch all of that data on a macro level to identify areas to focus on improving care and reducing costs.

On the technology front, new ways to leverage cloud-based, social, location-aware, mobile, “Big Data,” and other technologies are coming to market rapidly. Vendors are working on models today that will create virtual marketplaces for practices of all kinds to easily select the clinical, operational, and specialty-specific functionalities they need, and then assemble them seamlessly in a virtual environment. The work that has been done on intuitive interfaces translated for desktops, tablets, and smartphones allows those sets of functionality to be presented to clinicians, office staff, and others in the practice in a way that makes them immediately usable anywhere with little or no training.

## Evolving Role of HIM

A brave new world for the practice EHR has emerged, and as the information management needs of the provider market evolve, this very large and foundational component of the healthcare system will need increasing assistance from the HIM community. As HIM professionals have worked in the hospital and hospital system setting throughout the transition from paper to electronic records, and have handled the challenges of electronic responses to audits and release of information requests, the HIM community has a tremendous amount of knowledge to share with the practice community that now, for the first time, faces similar challenges. Physician practices especially need HIM expertise to help them with reporting and compliance requirements. Practices are already overwhelmed with the growing number of different reporting requirements they face from the government (i.e., meaningful use and HIPAA), private payers (i.e., pay-for-performance), and entities partnering with them for accountable care organizations or HIE initiatives. Whether HIM professionals are system-based and working with practices, or are independent contractors serving practices in their community, learning the EHR requirements practices face and the language they speak will be essential for HIM professionals to successfully aid physicians with this transition.

The EHR revolution for practices seems to finally be underway, with technologies and incentives coming together to create an urgent need for systems. For HIM professionals, the digitization of tens of thousands of practices of all kinds across the country means a massive influx of electronic personal health information that must be managed and dispersed efficiently and in compliance with an ever more complicated regulatory landscape.

Clearly there is a great deal of work and lessons to be learned, but the opportunity to digitally transform healthcare is one of the most important challenges this industry will face.

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