## GENERAL SURGERY NEWS



In the News

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## In Quest of an EMR System for Surgeons

A Surgeon and a Reporter Search for the Ultimate—or At Least Passable—System

by Victoria Stern



Jarrod P. Kaufman, MD, FACS, has been searching for an electronic medical record (EMR) system for his small surgical practice. With more than 100 systems on the market, Dr. Kaufman theoretically should have his pick.

However, over the past 10 years, Dr. Kaufman has personally used four different EMRs and demo'ed more than 15, yet hasn't found one that entirely suits his needs as a general surgeon. In fact, he recently went through a failed EMR implementation, which he called "a small catastrophe."

"Most companies claim to have an amazing system and boast that you can tailor it to your individual requirements," Dr. Kaufman said. "Essentially, this means a blank slate that you can spend months programming to say what you'd like it to say. But I have not yet found an EMR that is pre-programmed to deal with general surgeon—specific demands, one that can meet even the most basic needs of a general surgeon, such as a simple, hassle-free way to schedule surgical cases."

Wanting to take a fresh look in 2014, Dr. Kaufman enlisted the help of a science writer (myself) to see if any general surgeon–specific EMRs actually exist and, if so, how well they work.

Our main goal: Find an EMR system for Dr. Kaufman's practice that is designed for general surgeons.

Our process: Look for a system that is made specifically for or that markets itself to general surgeons. Contact companies with highly rated systems. Test the technology.

Before we began our investigation, Dr. Kaufman described his predicament to me. The main issues, he said, boil down to technology, speed and cost. Certain EMRs target subspecialties—basic protocols set up for pediatricians, family practice physicians or gynecologists—but none appear pre-programmed to handle the most common demands of a general surgeon, the bread-and-butter procedures and daily business of any surgical practice.

"If you're lucky, an EMR might have what you need to complete an interaction with a patient for one of the top 10 general surgical problems," Dr. Kaufman said. "So, if a person has biliary colic, for example, the EMRs I've seen aren't set up so I can easily transition to booking the case in the hospital. It's this kind of really basic stuff that is lacking."

Instead, Dr. Kaufman would need to customize the EMR software himself to capture all essential aspects of surgical care and patient management, a process that takes no small amount of patience and time out of an already overextended schedule. In some cases, the time required to tailor an EMR is so significant that practices will hire full-time staff to accomplish this task, constituting another expense in an already costly venture.

In fact, according to a 2013 RAND survey, the current state of EMR technology is one of the top reasons physicians report being dissatisfied with their jobs. In the report, physicians' main concerns about EMRs included the learning curve required to master the new technology, time-consuming data entry, and reduced physician—patient interaction. Reflecting on the inefficiency of EMRs, one general surgeon in the report recalled:

The first place we started seeing [an electronic health record], if you will, was in operating rooms [during] the perioperative time ... where the nurse would be recording. She used to fill out a form by hand. Now it's in the computer, and everybody was like ... "it's taking three times as long to populate all the fields that you have to populate." ... The joke early on, like on an appendix or a gallbladder or something that went really fast and easy, is: "We're done, and the nurse is over there still trying to get in the pre-op data." She has now spent 90% of her time at a screen, having to enter data that takes her away from circulating.

Speed also is a major concern. During company demonstrations of a product, a surgeon is presented with an idealized scenario, watching a representative zip through various training modules. If the EMR is Web-based, the demo may be on a particularly fast line, or perhaps the demo is not even live. Both scenarios can give potential buyers a false sense of how fast the system really performs.

Once you purchase the EMR, however, speed may become a different story. Aside from your Internet speed and the memory available on your server—factors you can more or less

control—issues with an EMR's speed usually come down to how well the software is designed or installed, or how overwhelmed the EMR's data center connection is, as there may be thousands of other users trying to access data.

"With one of our EMRs, I'd sit there staring at a spinning wheel for three minutes, just trying to log in," Dr. Kaufman recalled.

Yet another issue is cost. EMRs can be a heavy financial burden on a practice. According to a 2014 survey conducted by Medscape, 23% of responding physicians reported paying \$50,000 or more per physician to purchase and install their EMR, while only 8% paid less than \$10,000. For some systems, the majority of the costs are up front; for others, the costs creep up throughout the year in hefty maintenance fees or software upgrades.

"You walk in thinking I'm spending \$20,000 for a system, now I'm done; but then the company tacks on \$5,000 per year per user for maintenance and updating fees," Dr. Kaufman said. "There are often things that you learn only after you've signed up and are six months into implementation."

Even EMR systems that market themselves as "free" often come with a catch. For instance, a free EMR may charge you a substantial fee to transfer patient data out of the system. One of the best-known free EMR systems appears to make money by selling advertisements and anonymous patient data. Another free system that we investigated puts the onus on patients, charging them a yearly fee to access a patient portal to book appointments, view test results and contact their physicians.

If the EMR does not include a practice management suite, physicians will need to purchase one in addition to a patch to connect the new EMR with the practice management system.

"So, imagine you've just bought a \$50,000 EMR and a \$30,000 practice management system, and now you have to pay someone \$10,000 for the two systems to talk to each other," Dr. Kaufman said. "[That's yet] another expense to contend with."

## **The Demo Process**

Dr. Kaufman and I began to sift through a long list of EMR companies. Unfortunately, we didn't find a single EMR made for general surgeons, only systems that claimed to cater to general surgery in addition to many other specialties. We had barely begun the process, yet already had answered our first question: There is no general surgeon–specific EMR.

We decided to pick a handful of EMRs that physicians generally rated among the best systems, according to the 2014 Medscape survey, and that also catered to small practices. At this point, our hope was that one or more would have robust modules already in place for general surgeons.

I contacted about a dozen companies to schedule demos, informing them that I would be shadowing a general surgeon as he looked for a new EMR system for his practice. Several

companies declined to participate. One explained that "some proprietary information is given during this cycle that we do not wish to be made public." Another system was not compatible with Mac OS, which meant Dr. Kaufman and I could not test it at all. Other companies agreed to our conditions, and we began scheduling demos.

Below, I've highlighted our experience with three actual EMR companies. [The names of the companies, products and representatives have been changed.]

1. **Company X:** We arranged a conference call with this company's representative, Ms. Smith, who launched into her monologue, explaining that Product X is a cloud-based system with more than 1,500 users. When Dr. Kaufman asked how many surgical practices use Product X, Ms. Smith did not know.

After her introduction, Ms. Smith walked us through Product X's general displays: main category tabs for dashboard, patients, schedule, messaging, reports and preferences at the top of the screen. Under each heading, she described how a physician could fill in basic information. In the "patients" section, for instance, there is a tab for demographic information, patient preferences and insurance information—all pretty standard stuff.

When Dr. Kaufman asked if he could schedule surgery for a patient at a different institution, Ms. Smith noted that the demo site is set up as a single location for a single provider, but that he could introduce a new location. Although the displays in the demo are general, Ms. Smith assured us that "[Product X] is customizable by specialty and by user. Any of the tabs can be reordered, renamed or removed if not applicable."

Toward the end of the tour, Dr. Kaufman asked whether Product X included a practice management system. Ms. Smith said Product X is not an all-inclusive suite but the company partners with practice management vendors, and it may cost Dr. Kaufman an additional \$3,000 to \$4,000 to make a practice management system compatible with Product X.

After the demo, Dr. Kaufman pointed out to me that Ms. Smith had not prepared a general surgery—specific platform. She showed us only the very generic, bare-bones demo platform, which ran without a hitch but had nothing surgeons use or need. Although she claimed that "[Product X] is customizable by specialty," this was not necessarily a plus for Dr. Kaufman. He would need to customize everything for his personal use.

"Basically she was showing us fluff, not any actual content," Dr. Kaufman said. "From my experience, the rep ends up showing you what they want to show you, not how the EMR would apply to you."

Additionally, linking the EMR with a practice management system would be time-consuming and expensive, likely significantly more than the \$4,000 that Ms. Smith estimated. Dr. Kaufman described a typical scenario: When you try to export data from an EMR to a practice management system, it may mix up the data, for example, sending a patient's Social Security number to the phone number box. Then, you have to pay a software company for a patch so the two systems can communicate. It may not be a one-time fee, either; you may

face ongoing charges to fix a range of issues.

"Overall, Ms. Smith provided a perfect example of the issues I was talking about," Dr. Kaufman said.

2. **Company Y:** When this company's demo began, our tour guide, Mr. Jones, informed us that Product Y is designed for physicians in family practice. When Dr. Kaufman asked whether the company had developed any general surgeon–specific content, his answer was a simple no. Similar to Product X, Dr. Kaufman would need to create those templates from scratch.

Probing a bit more, Dr. Kaufman asked whether the EMR contains a module that would allow him to book a surgical case in the hospital. Could he upload a specific form to the EMR, one that the hospital requires to book a case, and amend that form and send it to the hospital?

"We can't function without booking surgical cases, and hospitals are very strict about the forms we use to book a case," Dr. Kaufman explained to Mr. Jones.

After checking with a colleague, Mr. Jones confirmed his belief that Product Y does not have the capability to upload a specific form.

We quickly switched gears to discuss pricing. The initial cost is \$2,395 per provider, which includes \$1,195 for maintenance—a package that contains product support, enhancements, upgrades, e-prescribing and more. If you want to continue the maintenance after the first year, it will cost \$1,195 per provider per year. The charges increase when you add the practice management system, a new component of Product Y, which comes to \$249 per provider per month, and the billing system, which takes out 7% of a practice's billable charges each month.

There are other fees as well. If you want your system hosted by the cloud, that costs \$39 per connection per month, and if you want to interface with labs, that's \$750 per lab per practice. Each price alone doesn't sound too bad, but when you add it up for each user each month, the cost balloons. For a practice composed of two surgeons and 10 other staff, Dr. Kaufman would be shelling out well over \$20,000 annually plus the 7% of billable charges.

"The problem," Dr. Kaufman said, "is that you essentially have to create your own software, which could take months, and it will cost you a bundle to do so once you tack on the EMR, practice management and especially, the billing fees."

3. **Company Z:** This company had the most comprehensive presentation we had seen so far. Sales executive Mr. Williams explained that the EMR, Product Z, is a cloud-based system that includes a suite of fully integrated products: an EMR, a practice management and billing system, and a patient portal and messaging center.

One major advantage of Product Z is that it had actual content relevant to general surgeons. We were guided through a patient visit, in which Mr. Johnson, a clinical sales specialist,

showed us how a surgeon could schedule and create a care plan for a patient with an inguinal hernia. Mr. Johnson noted that his company could customize more general surgery–specific platforms for Dr. Kaufman.

Company Z appears to be particularly strong in customer service. For instance, as Mr. Williams explained, if payors are having problems switching from ICD-9 to ICD-10 and deny a claim, Company Z will lend physicians that money interest-free until the claim is approved. Additionally, the company says it will largely customize the EMR for the physician. If Dr. Kaufman wants a module that pertains to surgical oncology, Mr. Johnson said Company Z will construct it for him. If Dr. Kaufman needs to send a specific form to the hospital to book a case, Mr. Johnson said the company will build it for him at no cost.

The hitch came when we discussed cost. True, Company Z does not charge for each component of its services, but it does charge about 7% of a practice's annual revenue. Although Dr. Kaufman noted that this was a common fee for billing services, it is still a great expense. "If my practice earned \$1 million, we'd be paying \$70,000 for the year," Dr. Kaufman said. "What if we earned \$2 million? That would be \$140,000. Yes, Company Z does offer a lot of services, but you're paying through the nose for them."

Dr. Kaufman is still looking for an EMR system that's right for him. At the moment, his practice has no EMR.

"It is so time-consuming to look at these systems," Dr. Kaufman said. "Eventually, after seeing two or three, you get exhausted and end up just trying to choose the 'best' one out of the batch, even though you haven't actually seen the system—you're only on a demo."

From Dr. Kaufman's personal experience and our demo experiment, it appears that all EMRs and practice management programs basically have similar degrees of dysfunctionality for a general surgeon, or they come with a big price tag.

Despite this, Dr. Kaufman's hope is that "because we are raising the issue and bringing attention to an unmet need, some EMR companies will develop well-thought-out, robust programs specifically for general surgeons."

Jokingly, Dr. Kaufman said, "You and I should just create our own EMR for general surgeons. We'd make millions." He paused for a moment and then admitted, "I'm actually half-serious."