The *Fire* Next Time



EMRs/ EHRs/PHRs
Case History

Sharp HealthCare's effective use of an ambulatory EHR during the California wildfires meant uninterrupted healthcare for displaced patients and clinicians.

By E. Victor Brown, Senior Editor

Catastrophic events affecting thousands, such as the recent California wildfires, may be the truest indicators of the effectiveness of electronic health records (EHR) in all circumstances. Based in San Diego, Sharp HealthCare is an integrated regional healthcare organization that includes four acute care hospitals, three specialty hospitals, three medical groups and a number of other facilities and services.

With some 2,600 physicians on the hospital's medical staff, 1,500 physicians in affiliated medical groups and over 14,000 employees, the Baldridge Award-winning hospital is a recognized leader in California healthcare. In 2005 — two years after the last devastating wildfire and two years before the recent conflagration — two of Sharp's three medical groups known as Sharp Rees-Stealy, Sharp Mission Park and Sharp Community Medical Groups began the process of implementing an ambulatory EHR system called TouchWorks from Allscripts. While optimum care for Sharp's large patient population was the driving force behind the implementation, the events of the week of Oct. 21, 2007, revealed its true strength.

An Uncommon Weekend

Long before sunrise on Sunday, Oct 21, as southern California residents slept, wildfires were already wreaking destruction up and down the state. By that evening, the Sharp Healthcare executive team began getting calls from operations managers informing them of reports from police and fire departments that fires were approaching medical facilities. Brent Steineckert, Sharp Rees-Stealy and Mission Park's ambulatory EHR manager, prepared for the worst. "The fires grew so quickly and fast that by Sunday night, we knew we'd need to close at least two clinics in close proximity of fire ground zero," says Steineckert.

Pages went out to administration and physicians were contacted telling them not to show up to those clinics on Monday. Staff was instructed to stay home and a series of conference calls were set up to periodically occur throughout the week. Updates were communicated and resources were rerouted. "A challenge faced right off the bat was that our existing clinics that remained open expected staffing shortages for those living in areas impacted by the fires," says Steineckert.

Sharp Rees-Stealy's primary care appointment scheduling processes are centralized through a call center, which was in an unaffected area near central San Diego. Since the call center was still operating and does so 24/7, it would make the ideal command center/communications hub to interact with patients in need of medications and other critical needs. Command center decisions flowed from physician leadership, which included the associate medical director, the CEO, her VP and key directors who gathered each morning to make decisions on what clinics to open, which to close, how to communicate that information, reroute resources and other logistical concerns.

Monday

By Monday, a large clinic was closed in the Rancho Bernardo area of San Diego County as simultaneously a smaller clinic met the same fate in the Carmel Valley/Del Mar region. The two clinics house anywhere from 40 to 50 physicians and more than 200 staffers, and see an average of a thousand patients each day. Within three hours of the first two closings, Sharp Rees-Stealy was forced to close another clinic due to fast-moving smoke and fire. The approaching evening would see even more closings, finally reaching a total of five.

San Diego evacuated more than 100,000 people who left with little notice and few resources, making employee tracking of those without cell phones difficult at best. The overloaded cell networks made cell phone communication unreliable as well. "We employed whatever means at our disposal to get information out, such as establishing central call-in lines with numbers posted on the Sharp Web site and answering queues on general phone lines," says Steineckert. "Our goal was that if someone did attempt to contact us anywhere within the Sharp Healthcare organization, they could be routed to the appropriate party."

In order to deal with people calling in experiencing smoke-related and other medical problems, the decision was made by the physician leadership team to put several physicians in the call center so that when these types of calls came in, physicians could assess them. "In many cases, the physician was able to take care of the patients concerns completely, right over the phone, primarily due to the availability of the EHR," says Steineckert.

Call Center

One of those physicians asked to work the call center was Theresa Siefken, D.O., Family Medicine, at Sharp Rees-Stealy. Siefken's clinic — which is near the border

in the Otay Ranch area — had already been closed by Monday afternoon due to smoke. Procedurally, several "runners" composed of members of the Sharp Rees-Stealy EHR training team and medical assistants (MAs) would take the patient calls, print out the task for each patient calling in and alternate dropping them off to each physician working the phones in the call center.



"I only went to one site, but the MA training coordinators from my team would be deployed to different sites each day based on need from a clinical perspective."

—Sherrie Lynn Dasalla
Sharp Healthcare

"We were set up in cubicles with a desktop that gave us immediate access to our standard screen in the EHR where we would call up a patient's chart with all of their prescriptions and medical history available," says Siefken. At that point, we call them back, explain to them that we are going to help them get their prescriptions and work with them to find a familiar pharmacy that they can reach."

Physicians in the call center worked at least eight hours with a short break, as patient calls were continuous. In addition to filling prescriptions, call center physicians worked with a number of patients in some type of physical distress in real time. "We were able to find out enough about their situation and handle it like a visit over the phone, advise them (with some needing to be routed to urgent care or the ED) and then we documented the task," says Siefken. "There was no anxiety in dealing with unfamiliar patients because of the significant time we had all spent using the EHR under more normal circumstances; so, procedurally, everything felt like business as usual."

According to Steineckert, medical records had been available to physicians online for approximately 18 months by the time of the fires, so they were already familiar with what they needed to do in terms of patient triage. "Our data center and network backbone were intact and unaffected so they were able to operate remotely, says Steineckert. "We also utilize Citrix for remote access so many of our physicians that aren't at a specific facility or location were actually handling their patient work from their home."

Training Protocols Pay Off

Steineckert explains that during the original ambulatory EHR rollout in 2005, physicians were encouraged to sign up for secure remote access. This not only gave them access during regular circumstances, but also gave them the ability to handle patients of colleagues in normal or crisis situations. "If the same thing had happened prior to the EHR implementation, there would have been a lot less that the physicians could have done because they didn't have access to patients' medical histories and current courses of treatment for effective decisions in the moment," says Steineckert. "What that meant for patients is that many would have had to be directed to EDs in order to err on the side of caution (keeping in mind that EDs are already overloaded), or we would have had to direct them to wait."

Sherrie Lynn Dasalla, EHR process analyst at Sharp Rees-Stealy had been part of Steineckert's rollout team doing workflow analysis and workflow redesign for the ambulatory clinics' transitions to the EHR platform. Additionally, Dasalla works with the training coordination effort, which includes three other training coordinators. "We all work together to organize all training efforts, including the creation of role-based training curricula; training materials and documentation; online training modules and Webcasts; and, post-training support for all of the staff at all of our clinics throughout San Diego County," says Dasalla.



"We were set up in cubicles with a desktop that gave us immediate access to our standard screen in the EHR where we would call up a patient's chart with all of their prescriptions and medical history available. At that point, we call them back, explain to them that we are going to help them get their prescriptions and work with them to find a familiar pharmacy that they can reach."

—Theresa Siefken, D.O.
Sharp Healthcare

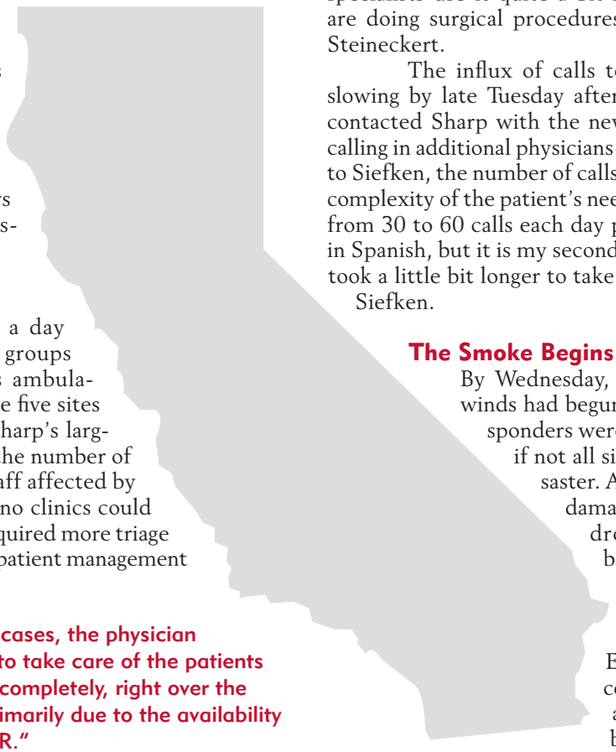
Training involved nearly 400 providers across 26 different specialties and a clinical staff of more than 1,800, which included MAs, licensed vocational nurses and registered nurses as well as support and administrative staff. Two-hour classroom training sessions were employed for the modules rolled out at that time, which included the successful completion of mandatory pre-requisite Web-based modules.

Prior to the fire, Sharp was using the TouchWorks EHR Version 10 and was in the midst of training for the Version 11 upgrade at the time of the fires. "We hired internal staff as trainers during rollout because they were already Sharp Rees-Stealy employees who could train from experience, understand clinic workflow and provide credible answers to questions from our end users," says Dasalla. "Our trainers also act as an invaluable resource since they are a fresh set of eyes for the EHR team, especially at the point of training curricula and documentation creation."

The Web-based nature of TouchWorks and its module configuration had not only been prime selling points for Sharp, but were also now critical to their use of the EHR during the fires. "With many EHRs, you have to install these very large resource-intensive programs on a specific PC in order to run the record, but our EHR allows us to essentially take any off-the-shelf PC, plug it into our network and within five minutes, a physician can log in and access patient records," says Steineckert.

For more information on Allscripts TouchWorks, www.rsleads.com/805ht-203.

Part of the security protocol of the system in addition to user name and password, are security key fobs issued to each physician. "Security key fobs work by accessing a secure digital number that changes every minute, so even if someone has a physician's password and username, they wouldn't have the security key fob, which stays in the physician's possession," says Steineckert.



Tuesday

Nearly 7,000 patients a day rely on the two medical groups that are utilizing Sharp's ambulatory EHR system. From the five sites closed, two were among Sharp's largest sites, which increased the number of patients, physicians and staff affected by the closure. The fact that no clinics could be reopened on Tuesday required more triage at the call center and more patient management telephonically.



"In many cases, the physician was able to take care of the patients concerns completely, right over the phone, primarily due to the availability of the EHR."

—Brent Steineckert
Sharp Healthcare

According to Dasalla, many of the EHR trainers were MAs and could therefore assist at other sites experiencing clinical staffing shortages. Although she was part of the training team and did not possess a clinical background, Dasalla was still able to assist with incoming messages for providers. Senior training coordinator Monica de Leon assisted in organizing a deployment plan each morning for the trainers, letting them know to which sites they would be sent. "I only went to one site, but the MA training coordinators from my team would be deployed to different sites each day based on need from a clinical perspective," says Dasalla. "But towards the end of the week, we began to get back into the planning mode for training as the crisis began to pass."

Some of the non-affiliated medical groups in the area require patients to go to specific pharmacies, but Sharp patients can go to both affiliated and non-affiliated pharmacies as Sharp has all of the pharmacies in its patient coverage areas inside the EHR system. By Tuesday, the decision was made to cancel elective procedures being performed in the hospital. "This is significant because even though TouchWorks is an ambulatory system, our specialists use it quite a bit in the hospital when they are doing surgical procedures as well as rounds," says Steineckert.

The influx of calls to the call center weren't slowing by late Tuesday afternoon, so call center staff contacted Sharp with the news, resulting in leadership calling in additional physicians for a night shift. According to Siefken, the number of calls per hour depended on the complexity of the patient's needs, but averaged anywhere from 30 to 60 calls each day per physician. "I am fluent in Spanish, but it is my second language, and therefore it took a little bit longer to take care of the patients," says Siefken.

The Smoke Begins to Clear

By Wednesday, the oft-cited Santa Anna winds had begun to lose force and first responders were getting a handle on most, if not all situations in the ongoing disaster. Although the displacement, damage assessments and water drops weren't over, Sharp began to see the return of some sense of normality as memos of Sharp's plans to continue with EHR training, normal procedures and in-patient and ambulatory flows began to be scheduled for the coming days and weeks.

As the healthcare continuum debates, resolves and improves its understanding of the importance of EHRs and other increasingly vital health IT, Siefken has words of wisdom for peers looking to EHR implementation under more "normal" circumstances. "Physicians are so busy during the day, you have to have people who come in regularly to support you, re-educate you and help you through the learning curve to understand the workflow and the technology," he says. "It is natural to not want to go through change, but it's well worth it in the end as I can't imagine working for a medical group that doesn't have an EHR in place." **HMT**