



Springfield Clinic, LLP

Overview

Country or Region: United States

Industry: Healthcare—Healthcare providers

Customer Profile

Springfield Clinic, based in Springfield, Illinois, employs more than 1,400 people, including 195 physicians and surgeons who represent nearly every specialty. It has 24 locations across the state.

Business Situation

The clinic needed to consolidate multiple paper patient charts into a unified patient record that was easy to use and that physicians could access from anywhere, at any time.

Solution

Springfield Clinic deployed Allscripts Enterprise Electronic Health Record system and Tablet PCs running on Windows XP, Tablet PC Edition to all of its locations in a phased deployment.

Benefits

- Enhanced patient care, expedited results
- Easy accommodation of practice styles
- Reduced medical records expense
- Expanded clinical information
- Increased recruiting power

Multispecialty Clinic Improves Continuity of Care with Electronic Health Record Solution

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Springfield Clinic, the second largest medical clinic in Illinois, has more than 195 physicians and 24 locations. Many of its patients see more than one physician at various locations, so multiple charts were often created for the same patient. The clinic wanted to maintain one record for each patient that could be easily and securely accessed by providers, at any time, from any location. It also wanted to analyze clinical data to improve processes. To achieve those goals, Springfield Clinic implemented the Allscripts Enterprise® Electronic Health Record (EHR) system on Motion Tablet PCs running Windows® XP, Tablet PC Edition. Allscripts Enterprise EHR, based on the Microsoft® .NET Framework, is easy to use and flexible enough to meet each medical specialty's requirements and individual practice styles to enhance continuity of care, increase efficiency, and reduce medical record costs.



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Situation

It is no secret that administrative costs play a major role in the high cost of healthcare today. And much of that cost can be attributed to the sheer volume of paperwork—filling out, processing, filing, retrieving, and storing millions of pieces of paper. Driven partly by the provisions of the Health Insurance Portability and Accountability Act (HIPAA) governing the standardization of electronic administrative, financial, and patient data, and partly by the growing need to contain costs, healthcare organizations have begun to look at how to convert all of those pieces of paper to more easily accessible electronic data.

Springfield Clinic, headquartered in Springfield, Illinois, is nearly finished with achieving that goal and has already moved three-quarters of its locations to paperless environments.

Founded in 1939, Springfield Clinic today has more than 260 medical providers, including more than 195 physicians and surgeons covering virtually every specialty. To respond to the organization’s growing patient base, it expands by an average of 10 physicians each year. The majority of the clinic’s providers are located at Springfield sites, including the main campus in Springfield, Illinois, where a 118,000-square-foot building expansion is scheduled to open in August 2008. The clinic also operates more than 25 satellite offices and outreach locations throughout 12 counties in central Illinois. These offices are staffed by local primary care providers and offer the services of more than 20 Springfield Clinic specialists who travel to the outreach locations several times a month to see patients.

As the number of Springfield Clinic patients and physicians grew, so did the organization’s Medical Records staff. By 2005, the clinic had 160 full-time Medical Records staff

and 22 file storage locations holding an estimated 45 million pieces of paper. Some of that paper represented duplicate charts for patients who see a primary care provider at one location and specialists at other locations. Having the right chart at the right place became a challenge. If a patient’s chart wasn’t available at a new doctor’s site, that provider would create a new “shadow chart.” This made it difficult for a physician to have the full patient record. It also meant that Springfield Clinic specialists who visited outreach locations had to load all the X-rays and charts for the patients they were going to see into the trunk of their car and unload them at the outreach location. Then they had to load them all back into the car for the return trip.

Keeping most of its clinical data on paper also made it difficult for the clinic to analyze its clinical data to support quality reviews. And it was difficult to create accurate reports for emerging initiatives such as the Health Plan Employer Data and Information Set (HEDIS), which measures performance based on important dimensions of care and service, and Pay for Performance, which rewards healthcare providers for meeting certain measures for quality and efficiency. “We had done a great job of building systems on the operational side, but we weren’t able to truly mine the data from a clinical perspective to get an objective view of how effective any particular treatment or process was,” says James Hewitt, Chief Information Officer for Springfield Clinic.

By 2005, the clinic had automated some parts of its operations. It used the IDX Flowcast (now GE Centricity Business) practice management system for patient registration, scheduling, and billing. It had a repository system from Allscripts that stored all transcribed patient reports and test results. And it used PeopleSoft for accounting, purchasing, and human

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resources. The clinic ran its infrastructure on the Windows Server® 2003 operating system and used Microsoft® Exchange Server 2000 for messaging. Both the administrative staff and providers used Microsoft Office 2003 Professional running on the Windows® XP operating system with Service Pack 2.

The Springfield Clinic wanted to take the next step to enhance patient care by implementing a system that integrated all patient information—reports, test results, digital images, and related correspondence—into a single electronic patient record that was available immediately to physicians in the Springfield Clinic network regardless of location. In addition, the clinic wanted to expedite test results and reduce paper handling and storage costs. So the clinic went in search of an electronic health records (EHR) system.

Solution

The Springfield Clinic IT committee, which included providers, IT staff, and administrative staff initially looked at virtually all the EHR solutions available at the time, evaluating them based on several criteria, including:

- **Features and functions**—including how the solutions integrated with third-party applications, which hardware they supported, and their flexibility to be adapted to specific requirements of individual medical specialties.
- **Company viability**—including their ability to support large organizations and the level of the vendors' research and development expenditures to ensure that the product would evolve with the needs of the industry.
- **Practical usability**—including ease of deployment, ease of use, and ease of management.

The project was made more challenging by the fact that a majority of Springfield Clinic outreach locations are not owned by the

clinic and so were not part of its network infrastructure. “That presented a major challenge in our search for an EHR system,” says Hewitt. “We needed to find a very lightweight, browser-based solution that would allow providers to gain access to our system over a standard Internet connection no matter where they were.”

Based on those criteria, the IT committee narrowed the original list to four vendors. After closer evaluation, including visits to the vendors and talking to other customers, the Springfield Clinic selected the Allscripts Enterprise Electronic Health Record.

“We picked Allscripts Enterprise because it supports the needs of a large, multispecialty clinic,” says Hewitt. “It’s a full-blown EHR system that allows us to do all of our charting without dictation. Allscripts understands the complexities of various specialties such as oncology, infusion units, and ophthalmology and offers the flexibility to meet those needs. Also, it is a browser-based system, which allows us to address the requirements of our outreach clinics.”

Gaining Browser-Based Access from Anywhere

Allscripts Enterprise takes advantage of the Windows Forms, ADO.NET, and ASP.NET Web services components of the Microsoft .NET Framework 2.0 so that users can access all the Allscripts Enterprise modules through a browser. “If providers have a Windows Mobile® device, they can access our application through that as well,” says Lee Shapiro, President of Allscripts. “The great thing about being on the Windows operating system is that it allows our clients to access Allscripts Enterprise anywhere they have secure access to the Internet.”

In addition to the software, Springfield Clinic needed a hardware device that was portable enough to be easily carried to the point of

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care, yet had a large enough screen so providers could clearly read text and view digital images. The device also had to be fairly lightweight and provide at least an eight-hour battery life. The selected device also needed to support fast performance, built-in wireless connectivity, the ability to record dictation, and biometrics so that providers could log on and write prescriptions and orders and sign off on documents with just a scan of their finger. “Biometrics is very important because physicians sign hundreds of pieces of paper every day, and we didn’t want them to have to pen in a password that many times a day to approve forms,” says Hewitt. After looking at several vendors, the clinic chose to deploy Motion Computing LE 1600 and LE 1700 Tablet PCs running the Windows XP, Tablet PC Edition operating system.

Working Out the Details at the Pilot Site

At the end of 2005, Springfield Clinic partnered with Allscripts to develop an enterprisewide EHR implementation strategy. It chose its Hillsboro, Illinois location for the pilot site because it was the farthest away from the main campus, because one of its physicians was a strong champion of the EHR implementation, and because it was very efficient with paper charting. The location also had a small staff of four physicians and one nurse practitioner.

To prepare the pilot site, the clinic had to stabilize connectivity between the main campus and the Hillsboro location and set up the wireless network infrastructure. “None of our sites had a wireless network so we had to develop a wireless strategy and deploy that network in a short amount of time”, says Hewitt. “I can’t emphasize enough the importance of making sure that your technology infrastructure is sound, because you’re moving all of the processes that were done on paper to a very mobile solution where everything is now in electronic format.” After

setting up the wireless network, the IT staff installed docking stations for the Tablet PCs, printers, and scanners.

Meanwhile, the IT staff installed 12 Allscripts Enterprise EHR modules on two clustered HP ProLiant DL580 G3s and four ProLiant DL360 G4s all running Windows Server 2003 R2 Standard Edition in the clinic’s data center on the main campus in Springfield. All the information collected through the various EHR modules is stored in a Microsoft SQL Server® 2005 database using an HP 5000 Storage Area Network.

The Springfield Clinic IT committee decided to implement the entire Allscripts Enterprise EHR suite of products—including Base, Document, Dictation, Results, Rx+, Note, Charge, Scan, Orders, Analytics, Dragon Dictation, and Physician Home Base—at the same time in the pilot site. “By implementing the full EHR system one site at a time, we could do a complete reautomation of the paper workflows and provide a high degree of training and support at that site. After the site was stable, we moved on to the next site,” says Hewitt.

The implementation team, consisting of four nurses and one technical person, arrived at the pilot site in March 2006. “Because Hillsboro was our first site, we spent a lot of time getting the whole process right,” says Hewitt. “We wanted to create an implementation process that could be replicated consistently across our entire clinic. We also needed to refine the new digital office workflows as well as test the entire technical infrastructure.”

About six weeks before the go-live date, clinic physicians started reducing their schedules for the week of deployment. Two weeks before the go-live date, the Education department began training the providers. Physicians were required to take eight hours

of one-on-one training, and nurses were required to take four hours. Then both groups had to pass a test to make sure that they were proficient on the system. On two evenings during the week before going live, all the providers and administrative employees at the pilot site ran simulations of patients going through the clinic to work out process and technical issues.

Bright and early on June 12, 2006, the implementation team flipped the switch, and the system was immediately available to the Springfield Clinic Hillsboro staff. They started immediately using Allscripts Enterprise EHR on their Tablet PCs for charting, dictating, ordering tests, writing prescriptions, and all the other tasks related to patient care. Paper charts were available if absolutely necessary but were rarely needed. After two days, the Hillsboro physicians and nurses asked that paper charts no longer be pulled, and the site was officially declared paperless. From that point on, all information and tasks were handled through the Tablet PCs. Some physicians resumed a full patient schedule within two days, and all resumed a full schedule within two weeks. At that point, the clinic started scanning all the paper charts into the Allscripts Enterprise system.

Following the successful Hillsboro site deployment, the implementation team moved to each additional site and repeated the process. By the third site, implementation was completed within two weeks. "On average, each site has been declared paperless after two days. It is truly amazing," says Hewitt.

Accessing Many Tasks through One Interface

Approximately 1,300 Springfield Clinic staff, representing patient accounting, research, nurses and providers, quality management, and administrative staff, use the EHR system. The patient scheduler can see physician

availability online through the link between the Practice Management system and Allscripts Enterprise. The nursing staff creates patient charts on the Tablet PC, writing notes directly into Allscripts Enterprise. Then the physician enters further notes into the chart, orders labs, writes prescriptions, and creates correspondence. Physicians dictate into the Tablet PC, sometimes while meeting with the patient, and forward those files to the appropriate voice server for transcription. In January 2008, Springfield Clinic started pilot testing Dragon NaturallySpeaking speech recognition software to expedite transcription.

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Within the Allscripts Enterprise Physician Portal, physicians view schedules, practice-performance data, and medical content. They also order medications and tests and review work tasks that need action such as lab results waiting for review and open charges that need to be finalized. In many cases, launching one of those tasks will launch a Microsoft Office program.

As of March 2008, the implementation team had completed 28 of its 35 sites. The organization had also scanned 30 million of an estimated 45 million pieces of paper into its Allscripts Enterprise EHR system.

Benefits

By deploying Allscripts Enterprise EHR, Springfield Clinic enhanced patient care by making it easier for physicians to access a comprehensive patient record, order tests, and get results faster. The clinic also was able to configure the system to match individual practice styles, reduce medical

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records expense, improve clinical processes, and improve recruiting prospects.

Enhanced Patient Care and Expedited Results

By implementing the Allscripts Enterprise EHR system, Springfield Clinic now has a single electronic record for each patient that is accessible, not only from any clinic location, but from anywhere in the world. “Continuity of care is very important,” says Hewitt. “Now, even if a patient sees multiple physicians at the clinic, all of those physicians have instant access to the most current information from their Tablet PCs. And if a physician on vacation gets a call about a patient, the physician has immediate access to those same records.”

Springfield Clinic physicians also use Allscripts Enterprise to instantly communicate with hospitals, insurance providers, and pharmacies, which means faster test results, more accurate coding and faster answers regarding insurance coverage. It also results in less wait time for prescriptions, and greater patient safety.

The increased speed of results initially presented an unexpected challenge for clinic nurses. Before Allscripts Enterprise was installed, the nurses always completed all tasks on their desks before they left for the day. The introduction of Allscripts Enterprise reduced the turnaround time for results verification and so increased the amount of work on nurses’ desks. “All of a sudden, the nurses had 15 days worth of work in front of them in the Allscripts Enterprise workflow portal, and they felt they had to stay to finish it all,” says Hewitt.

In the transition period, the nurses had to get used to the idea that the tasks waiting for them came in several days earlier than they would have with the paper-based system. It took some time to catch up with the new

system, but in the meantime, they were urged to go home at the end of their shifts. “We caught up with the new system within about two weeks of implementing Allscripts Enterprise, and in some cases, our turnaround times for results went from weeks, to a few days,” says Hewitt.

Easy Accommodation of Practice Styles

The rich user interface in Allscripts Enterprise made it relatively easy for providers to adapt to using the Tablet PC-based system. “The rich user interface that we found in the .NET Framework allows us to provide a very rich level of application functionality in Allscripts Enterprise that really wasn’t available with classic Web-based applications,” says Shapiro. In addition, because .NET supports storing large amounts of information in local memory, providers enjoy nearly instantaneous response time within Allscripts Enterprise modules.

Thanks to the rich user interface, Allscripts Enterprise is easy to configure to meet the needs of individual specialties and match individual providers’ practice styles. “A neurologist doesn’t practice the same way as a pediatrician; even two physicians in the same specialty may not practice the same way,” says Hewitt. “We’re able to easily modify the workflow in Allscripts Enterprise to quickly respond to the needs of a variety of practice styles and specialties.”

Reduced Medical Records Expense

Hewitt estimates that when all of the sites within the Springfield Clinic are on Allscripts Enterprise, the Medical Records staff will have no more than 60 full-time-employee equivalents, compared to 160 with the paper-based system. So far, much of that reduction has been handled through a normally high attrition rate in the Medical Records department. “During the months preceding the deployment of the new EHR system, as people left, they were replaced with

temporary staff,” says Hewitt. Others, whose positions were eliminated in the Medical Records department, were offered other positions in the clinic, including many new positions such as scanners and electronic indexers.

By moving to a paperless patient record system, Springfield Clinic was also able to eliminate 22 file storage rooms throughout its sites. In some cases, the space was converted to clinical or expanded waiting room space. In other cases, the space was repurposed for offices, a centralized transcription area, and a call center. In other cases, because the clinic was leasing the storage space, they were able to end the leases, resulting in an immediate savings.

Expanded Clinical Information

With all aspects of patient care recorded in the system, Springfield Clinic is able to analyze its processes more accurately to continue to improve its quality of care. “To do a quality audit with the paper-based system, we had to send out a small army to pull charts and do some sampling to see how we were doing on a particular treatment,” says Hewitt. “Now, we have the entire census at the click of a button and have 100 percent accuracy across the board on all kinds of diagnoses.”

The new availability of clinical data will help Springfield Clinic supply data for industry measurement initiatives such as HEDIS and Pay for Performance. The clinic is also using that data to analyze nonmedical aspects such as average wait time. “We’ve never been able to figure out what our average wait time is because we’re spread out,” says Hewitt. “Now, with the click of a button, I can run a report by specialty, by physician, by clinic, and look at average wait times so we can better manage that side of the business.”

Increased Recruiting Power

Springfield Clinic also finds the Allscripts Enterprise EHR solution useful in recruiting new physicians. Allscripts Enterprise EHR is used by more than 3,500 clinics and 700 hospitals nationwide and was ranked first in the KLAS physician satisfaction rankings for 2007. The KLAS Top 20 is an industry ranking based on service performance and results from in-depth interviews with thousands of providers who actually use Allscripts Enterprise EHR in clinical practice.

“Because EHRs are becoming more and more common in large clinics, new physicians see it as almost a requirement to consider joining a clinic,” says Hewitt. “Allscripts Enterprise EHR has such a strong satisfaction rating among providers that it further enhances our recruiting position.”

For More Information

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For more information about Springfield Clinic, visit the Web site at: www.springfieldclinic.com

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- Motion LE 1600 and LE 1700 Tablet PCs

Partners

- Allscripts