



## Transition to Electronic Record Keeping Yields 70-84% Reduction in Record Delinquency for Small and Large Health Care Centers

### Overview

**Country or Region:** United States

**Industry:** Health Care-Provider

### Customer Profiles

CentraState Healthcare System is a private, not-for-profit health organization located in New Jersey. It consists of multiple facilities, including a large acute-care medical center for 282 beds, a 171,000 square-foot outpatient center, and three senior-living communities.

Stevens Community Medical Center is a hospital and physician clinic serving more than 20,000 residents in Stevens County and west Central Minnesota.

### Business Situation

Paper-based record keeping slowed patient registration, physician reviews, treatment coding, billing and, sometimes, patient care in both facilities.

### Solution

Stevens and CentraState replaced their paper-based record keeping systems with Soarian EDM offerings from Siemens, which run on the Windows Server operating system and the Microsoft SQL Server 2008 database.

### Benefits

- Remote access for physicians
- Registration time reduced by two minutes per patient
- 93% reduction in unbilled charges
- Up to 94% reduction in coding turnaround time
- Faster record access and analysis
- Reduction in records requests
- Reduction in photocopying expenses

“Using remote access allows me to attend to my hospital patients while also attending to my office patients or family. When called in the evening about a patient care issue, I can quickly access patient records and lab information that permits me to make better informed clinical decisions.”

Charles Dinerstein, MD, FACS, Chairperson, Department of Surgery, CentraState

Stevens Community Medical Center is a hospital and physician clinic that provides comprehensive health care services to more than 20,000 residents in west central Minnesota. CentraState Medical Center is a large health organization and teaching hospital with an acute-care medical center, outpatient center and three senior-living centers in central New Jersey.

Both facilities moved from paper to electronic patient record keeping using the Siemens® Soarian® Enterprise Document Management system and its modules for Health Information Management, which run on the Windows Server® operating system and Microsoft® SQL Server™ database software. This transition helped to accelerate the process of patient care by expediting the patient registration process, reducing delays associated with locating paper records and providing doctors with remote access to patient data. It also dramatically reduced the administrative and financial burdens associated with delinquent medical records, delayed record reviews, unbilled accounts receivables and photocopying costs.

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## Situation: Stevens Community Medical Center

Stevens Community Medical Center's roots can be traced back to three small area hospitals that opened at the turn of the 20<sup>th</sup> century in rural Minnesota. Today, SCMC serves as a multi-specialty, fully integrated hospital and physician clinic and is licensed as a 25-bed Critical Access hospital.

Before 2009, SCMC was storing all of its patient records on paper which, over time, began to pose a workflow problem that often inhibited patient care. Patient registration was delayed by the manual scanning of insurance and identification cards – a process that was very labor intensive and error prone, and doctors were unable to work remotely because patient records were only available on site.

At the same time, the billing and coding processes were significantly delayed, often by 25 days or more, because of record delinquencies and the chaos associated with locating paper files. The accumulation of unfinished charts was occasionally too much for SCMC staff to handle, so outside coders were hired to clear the backlog. This created additional delays and expenses in the process, as individual charts had to be copied and shipped round trip to the coding service from the medical center.

The delays in coding also dramatically slowed the billing process, leaving multiple accounts receivable open for weeks or even months at a time. Audits were similarly challenging to complete because many records were located in off-site storage.

At the same time, because all patient information was contained in individual paper charts, only one person at a time was able to access it. If one physician was viewing a record, everyone else in the hospital had to wait in line.

### Stevens Community Medical Center



When SCMC expanded its facility in 1998 with a 15,000 square foot addition, and began to service more patients, the problems associated with paper record keeping became more pronounced. SCMC is now servicing over 20,000 residents in Stevens County and west central Minnesota. To accommodate this growth, the decision was made to transition towards electronic health records in 2009.

## Solution

Having been a Siemens customer for many years, SCMC decided to choose the Siemens Soarian Electronic Document Management (EDM) multimodule system as their facility-wide record keeping solution.

*“Using Soarian EDM has increased the efficiency of patient record chart completion.”*

*Dr. Greg Abler, Family Practice Physician, Stevens Community Medical Center*

Soarian EDM is a centralized, web-based document management system that allows hospitals to digitize their records and consolidate the separate components of a chart – online medical record, patient financial information, hospital stays and clinic visit history - into one location.

Soarian EDM was developed using the Microsoft .NET Framework and runs on Microsoft Windows Server and Microsoft SQL Server. Because Microsoft software was already in use throughout SCMC, Soarian EDM was a natural choice.

Although SCMC has not shifted entirely to online document management, plans to transition the Finance, Accounts Payable and Human Resources Departments to online data management are under way. SCMC's ultimate goal is to completely eliminate the need for off-site storage in the very near future.

## Benefits

Within just four months of implementing Siemens Soarian EDM, Stevens Community Medical Center has seen dramatic improvements in the areas of record requests, record delivery times, medical record delinquencies and unbilled accounts receivable. There has also been a sizable reduction in overhead expenses associated with storage and photocopying.

### **84% Improvement in Record Delinquency**

Prior to the implementation of Soarian EDM, it could take anywhere from 2-5 days for a file to reach the Medical Records department after a patient was discharged from SCMC. However, the files were often incomplete, occasionally

missing physician signatures or discharge summaries. As a result, physicians had to be located and interrupted to finalize their documentation, a process that was inconvenient for both parties, and could take weeks to complete. At times, physicians would request the chart for completion, only to find that it was in another department or in use by a different physician, which resulted in further delays. This delinquency problem in turn frustrated the Center's coding and billing efforts.

With Soarian EDM, physicians can utilize the internet to access patient files and complete documentation. They can finalize records from their offices in the clinic or, in the near future, from their homes, which expedites the process and results in greater physician satisfaction. In addition, multiple physicians and staff members can view and edit a record simultaneously, thereby eliminating the waiting process.

At SCMC, the Medical Records department experienced an 84% improvement in record delinquency in less than six months. Today, at any given time, there are only 50 outstanding records waiting to be completed, as opposed to 300. And all SCMC physicians, except for one, are accessing the system from their offices.

Not only has this accelerated the coding and billing processes, it has enabled the Medical Records department to be more compliant with local and national mandates.

### **30% Improvement in Unbilled Charges**

Prior to using Soarian EDM, SCMC's unbilled charges held for coding were as high as \$2.1 million, largely due to incomplete records.

Today, the result for SCMC is a reduction from \$2.1 million to \$627,000 in unbilled charges – a 30% improvement.

#### **94% Improvement in Coding Turnaround Time**

Before Soarian EDM, SCMC was experiencing long coding turnaround times, often as high as 30 days. Today, as records are being completed faster, and departments are receiving instant online notifications for record completion, the turnaround time has been reduced to an average of 2 days from the time of discharge – a 94% improvement in coding turnaround time.

Additionally, because SCMC was manually scanning insurance cards and verifying coverage once a month – a system that was prone to errors and difficult to search – patients without proper insurance coverage were regularly being served.

With Soarian EDM, the insurance cards are scanned directly into the online system and immediately validated for eligibility upon each visit. This process has decreased insurance denials and improved self-pay collection activity.

#### **Accounts Receivable Cycles Reduced by 10%**

Prior to implementing Soarian EDM, SCMC's accounts receivables cycles often reached highs of 72 days, as a result of delayed coding and billing.

Today, with the efficiency improvements in coding due to fewer records delinquencies, bills are generated faster, resulting in earlier payment from insurance companies. Today at SCMC, the longest accounts receivable cycle is approximately 65 days, a 10% overall improvement.

#### **Improved Patient Care from Faster Record Access**

The ability of physicians to access their patients' records remotely, from anywhere and at any time, has helped to improve the quality of patient care by allowing physicians to make instant decisions and employ immediate strategies, without compromising their attention to detail.

#### **Efficiency Improvement in Business Office**

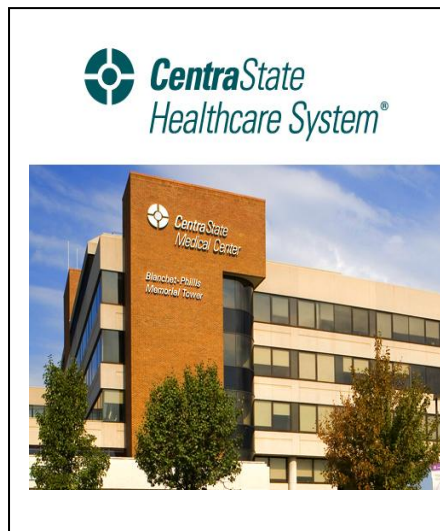
According to Samantha Deseth, the Director of the SCMC Business Office, there has been a boost in their office productivity with Soarian EDM as well, "...now that daily cash and remittance reports are available online. In addition, the staff resources necessary for audits are greatly reduced as records are digitized and the need to retrieve bulky boxes from off-site storage facilities is diminished."

#### **Situation: [CentraState Medical Center](#)**

In contrast to Stevens Community Medical Center, CentraState Healthcare System (CSHS) is a medium-sized medical organization serving a densely populated area of central New Jersey. It is comprised of multiple facilities, the largest of which is CentraState Medical Center, an acute-care medical center licensed for 282 beds. The organization's other locations include the Star and Barry Tobias Ambulatory Campus, a 171,000 square-foot outpatient center, and three senior living communities – Applewood Estates, Monmouth Crossing, and The Manor Health and Rehabilitation Center.

*"The Soarian HIM system has allowed me to adjust my workflow to my location and facilitated the completion of tasks, so that my time can more effectively be dedicated to patient care. The ease of access and remote capability has reduced my time to search, retrieve and complete medical records, as well as improved my ability to review old patient records at the point of care. Soarian HIM has become the "go-to" location linking my outpatient and inpatient needs. "*

*Kenneth W. Faistl, MD, Family Medicine, CentraState*



Before the formal launch of Soarian EDM in 2007, CSHS's goal was to build a single repository for a patient's legal medical record. With 65 inpatient admits, 160 emergency room visits and 260 outpatient visits per day, CSHS needed to find ways to streamline its information management process and save money.

### Solution

Having already experienced success with Siemens Soarian Clinicals, CSHS engaged Siemens Healthcare in early 2006 in a hands-on planning session to fully implement Soarian EMD. At that time, CSHS began building a history of patient documents in anticipation of going live with Health Information Management (HIM) in early 2007.

By January 2007, Soarian EDM was being used in the Patient Financial Services area as well as in Health Information Management, with the Online Medical Record and Completion Management Modules fully implemented.

Originally, Phase One of the implementation was slated for inpatient care only. Within a short period of time, however, personnel in the outpatient data departments were seeing the value in electronic record keeping, so they were moved into Phase One as well.

CSHS is also piloting a new initiative that allows for the scanning of OB-GYN antepartum records in the physician's office, which offers a complete view of a pregnancy, with both physician office records and the inpatient delivery records stored in a single episode.

Today, approximately 70% of CSHS's information is available electronically, with plans to transition the pharmacy in the near future.

### Benefits

#### **20% Improvement in Patient Registration Times**

Upon the implementation of Soarian EDM for Health Information Management, CSHS began scanning insurance cards and other important documents at patient registration. Eventually, point of service scanning and signature capture were rolled out across all registration and outpatient areas as well. Consent forms are now laminated and provided to the patient for review prior to signing. Paper copies are available upon request, but otherwise not offered. This "green initiative" has streamlined the registration process by 20%, with the average registration time taking six, as opposed to eight, minutes. According to Judy Gash, Director of HIM for CSHS, "This improvement helps to move patients to their care area in a more timely fashion."

### **71% Improvement in Record Delinquency**

As physicians are able to access records simultaneously and with ease, the number of delinquent records has dropped by a dramatic 71%. At any given time, the number of outstanding records is approximately 249, as opposed to 853 - before the implementation of Soarian EDM.

The Joint Commission and New Jersey requirement for delinquent records is fewer than 50% of average monthly discharges. CSHS is now at 11% - well within compliance.

### **Dramatic Reduction in Overhead Expenses**

As more and more information is being entered electronically, and being transferred electronically from other systems used by CSHS, the reduction in paper chaos and photocopying expenses is dramatically reduced. Files can be located without sorting through messy stacks, and information is available at physicians' fingertips. Today, all paper at CSHS is destroyed within 14 days of scanning documents, a process that saves space and money.

### **Surges in Patient Satisfaction**

Not only are patients satisfied by the shortened registration times, they are also delighted by the fast turnaround time on records requests. Before Soarian EDM, patients would have to fill out an authorization form in person to release a record and return at a later date to retrieve it. Now, by the time the patient is done completing the authorization form at the front desk, their entire record has been printed and made immediately available.

### **100% Adoption by Physicians at Day One**

CSHS has seen a surge in physician satisfaction with Soarian EDM, with 100% of its physicians adopting the system on the first day of implementation. Today, physicians can access patient files from their homes, clinic offices or while on vacation, without the hassle of traveling back and forth to the facility. In addition, the convenience of being able to see the complete patient picture – through the linkage of Soarian Clinicals to EDM – allows physicians to complete their deficiencies without logging off or transferring between systems.

According to Dr. Charles Dinerstein, MD, FACS, Chairperson, CSHS Department of Surgery, "Using remote access allows me to attend to my hospital patients while also attending to my office patients or family. When called in the evening about a patient care issue, I can quickly access patient records and lab information that permits me to make better informed clinical decisions."

### **Reduced Labor Needs**

In order to accommodate the shift to electronic record keeping, CSHS transitioned some employees to new positions, but no additional hiring was required. Today, thanks to the efficiency of Soarian EDM, CSHS expects to reduce its staff by one fulltime employee per year, without compromising their workflow or turnaround times.

### **Improvements in Patient Care**

Soarian EDM has allowed physicians to spend more time on patient care and less time on administrative tasks. According to Kenneth W. Faistl, MD, CSHS Family Medicine, "The Soarian HIM system has allowed me to adjust my workflow to my location and facilitated

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