



## Medical practice achieves end-to-end electronic patient management, increased quality of patient care, savings of close to \$3 million per year

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*By using technology to eliminate paper-based patient charts and reduce manual processes, Southeast Texas Medical Associates increased the quality of patient care while reducing costs and increasing revenue by close to a combined U.S.\$3 million per year. Based on the Microsoft platform and NextGen software, SETMA's end-to-end electronic patient management solution documents almost every aspect of patient care—both inside and outside the exam room. In addition to saving the clinic millions of dollars through lower supply costs, more accurate billing, and lower administrative overhead, SETMA's use of technology improves clinical productivity and the quality of care by providing physicians and nurse practitioners with complete, accurate, and up-to-date patient information at all times.*

### Solution Overview

#### **Customer Profile**

Southeast Texas Medical Associates is a medical practice with 19 physicians and 175 employees.

#### **Business Situation**

Using technology to eliminate paper-based patient charts and reduce manual processes, SETMA wanted to reduce costs and improve the quality of patient care.

#### **Solution**

SETMA implemented enterprise practice management and electronic medical records solutions from NextGen Healthcare Information Systems.

#### **Benefits**

- Savings of close to U.S.\$3 million a year through more accurate billing, lower administrative overhead, and lower supply costs
- Increased patient satisfaction
- Higher quality of care
- Greater clinical efficiency and physician productivity
- 100-percent audit compliance
- Easy management
- Extremely reliable

#### **Software and Services**

Microsoft® Windows® 2000 Server operating system with Internet Information Services version 5.0  
Microsoft SQL Server™ 2000  
Microsoft Exchange 2000 Server  
Microsoft Office 2000

#### **Hardware**

17 Dell and IBM servers  
150 desktop and laptop PCs

#### **Partner**

NextGen

### Situation

Southeast Texas Medical Associates (SETMA) was founded in 1995 by James M. Holly, M.D., and Mark A. Wilson, M.D. Their goal was to create an integrated, multi-specialty healthcare delivery system capable of meeting a family's entire spectrum of needs. Over the past seven years, SETMA has grown from a single clinic with 4 physicians, 26 employees, and 14,000 active patients to three locations with 19 physicians, 175 employees, and 39,000 active patients.

SETMA wanted to reduce costs while improving the quality of patient care, and saw technology as the best way to achieve this goal. In the beginning, SETMA's use of technology was limited to a UNIX-based billing system and a few stand-alone PCs running Microsoft® Word, which were used by four full-time medical transcriptionists. Transcription overflow was outsourced—a one-to-three-week process that sometimes left physicians with incomplete information during subsequent patient visits.

"Reliance on physical charts is the single largest obstacle to increasing clinical efficiency and quality of care," says Holly, SETMA's Managing Partner. "We deliver a service that requires the coordinated efforts of many people—primary-care physicians, specialists, nurse practitioners, and a large support staff—but a physical chart can only be in one place at a time. Maintaining paper records also requires significant administrative effort, at an added cost."

## Solution

Southeast Texas Medical Associates improved clinical efficiency and the quality of patient care by combining new technology with its traditional, personalized approach to medicine. Using electronic medical records (EMR) and enterprise practice management (EPM) software from NextGen Healthcare Information Systems, SETMA computerized every aspect of patient care and service—both inside and outside the exam room.

“We selected NextGen because their solution was very customizable, and flexibility in this area is critical to physician acceptance,” says Richmond Holly, Chief Technology Officer (CTO) at SETMA. “Their support for Microsoft technologies was another strong benefit, as the Microsoft platform is more cost-effective, easier to manage, and integrates seamlessly with our existing desktop environment.”

With its new solution, SETMA has achieved what Dr. Holly calls end-to-end electronic patient management. Patients can request prescription refills at [www.setma.com](http://www.setma.com), with requests automatically routed for physician approval and transmission to a pharmacy. In the exam room, caregivers capture charge-related information, create clinical notes, order lab tests, arrange referrals, set reminders for follow-ups, and “write” new prescriptions—all without picking up paper or pen.

Sophisticated workflow features built into the system increase physician productivity by enabling doctors to review test results, complete discharge summaries, and address other issues from any PC with access to the clinic’s network. Selected users can access the system from home or at the hospital, enabling physicians and nurse practitioners to make fully informed decisions when reacting to patient emergencies on evenings and weekends.

## Benefits

### Significant and Measurable Cost Savings and Revenue Enhancement

According to Southeast Texas Medical Associates Chief Executive Officer Darran Dollarhide, the clinic’s use of technology is delivering millions of dollars per year in cost savings. “We’re saving close to \$3 million per year through improved billing and lower administrative and supply costs,” says Dollarhide.

Working with external consultants, SETMA measured and documented the following metrics:

- **Medical transcription costs were cut** from \$5.93 per visit in 2000 to an average of \$0.25 per visit in 2001. Based on the number of visits in 2001, SETMA saved more than \$340,000.
- **Evaluation & Management service coding has improved**, increasing average billable charges for office visits by 4.23 percent. This coding improvement added more than \$150,000 in billable charges.
- **Coding and charge capture have improved.** The clinic’s overall average charge per patient visit increased from \$171 to \$206 (a 20-percent increase) and the average collection increased from \$80 to \$104 (a 30-percent increase). Based on the number of patients seen in 2001, total billable charges increased by \$2.1 million and overall collections increased by \$1.4 million.
- **The number of administrative staff required to handle patient charts decreased** by 76.7 percent (from \$2.65 per visit down to \$0.62) through the creation of an electronic patient record. This has saved the clinic more than \$120,000 per year in administrative costs.

*“We’re saving close to \$3 million per year through improved billing and lower administrative and supply costs.”*

Darran Dollarhide  
Chief Executive Officer  
Southeast Texas Medical  
Associates



- **The average cost for administrative supplies decreased** from an average of \$8.00 per patient to \$0.97, a decrease of more than 87 percent. Based on the number of patients in 2001 (55,000), the practice saved more than \$380,000 in paper and supply costs.
- **The average working-hour cost to establish a chart decreased** 85 percent, from 8.0 minutes per new chart to 1.2 minutes—equivalent to an annual savings of more than \$22,000.
- **The amount of time required to handle phone inquiries requiring a patient chart has been reduced** by 73 percent. The number of associated tasks to process these calls has decreased from 18 down to 2. Total annual savings exceed \$103,000.
- **Claim denials have decreased** by 26 percent. This has reduced average accounts receivable by seven days, thus increasing actual revenues by \$102,000.

*"My weekends are now spent reading to my grandkids instead of reading patient charts."*

James M. Holly, M.D.  
Founder and Managing Partner  
Southeast Texas Medical  
Associates

### Greater Physician Productivity

SETMA's embrace of technology is making its physicians more efficient and productive, freeing up time that can be better spent elsewhere. "In the past, I would dictate notes between appointments or at the end of the day," says Dr. Holly. "The vast majority of patient visits are now documented right in the exam room without any dictation, which frees up my time to review lab results or see additional patients. My weekends are now spent reading to my grandkids instead of reading patient charts."

### Complete Audit Trail

With all patient interactions automatically captured and documented, SETMA can easily monitor and report on the quality of care provided. Since installing the new system, SETMA has been audited six times—five Health Plan Employer Data and Information Set (HEDIS) audits and one from Blue Cross/Blue Shield. In every case, the result has been an impressive 100-percent compliance.

"Capturing all data electronically makes it possible to fully document the quality of care," says Dr. Holly. "Not only is a patient's physical visit fully documented, but every single point of patient contact is also captured—over 170,000 calls and responses a year. With all information in a single place, we're able to create reports that identify resource-intensive patients and take appropriate proactive action."

### Superior Reliability and Ease of Management

Although SETMA's technical infrastructure comprises 17 servers and 150 workstations, a staff of two manages the entire environment. Over the past three and a half years, total downtime has only been four hours—equivalent to a 99.987-percent level of availability. "We're able to achieve such a high level of availability because the Microsoft platform is so easy to manage," says CTO Holly. "Our old solution cost \$5,000 per month for outsourced management yet only delivered a fraction of the functionality we're currently managing with only our internal resources. Had we selected a UNIX-based solution, it would have severely complicated our IT environment and required the hiring of additional IT resources."

### Increased Patient Satisfaction

For Dr. Holly, increased patient satisfaction is the greatest benefit provided by SETMA's embrace of technology. "Patients satisfaction depends on three criteria: access, accuracy, and continuity of care," he says. "Our patients absolutely adore electronic communications. It gives them a way to request a prescription refill or schedule an appointment outside of office hours. Accuracy is also



improved because referrals and prescriptions are generated in the exam room, with the latter checked against the patient's prescription history for potential drug interactions. Finally, because every patient interaction is automatically captured and documented across all touch points—with the information immediately available to all caregivers—we're able to deliver greater continuity and a higher quality of care.

"The real payoff to a 'systems approach' to health-care delivery... is in the improved care our patients are receiving through electronic patient management. Improved patient access, improved monitoring of treatment plans, improved preventive health initiatives, improved implementation of national standards of care are all part of this improvement in patient care."

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For more information about NextGen solutions, go to:  
<http://www.nextgen.com/>

For more information about Southeast Texas Medical Associates, go to:  
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