



Windows Mobile Customer Solution Case Study



CARROLLTON SURGICAL GROUP, P.A.

Mobile Solution Boosts Medical Practice's Revenues 20 Percent While Enhancing Care

Overview

Country or Region: United States

Industry: Healthcare

Customer Profile

Carrollton Surgical Group, P.A., located in Carrollton, Georgia, has provided surgical care to residents in West Georgia and East Alabama for 50 years.

Business Situation

The practice had an electronic health record, practice management, and interoperability solution. But the solution's effectiveness was limited because doctors couldn't readily access it remotely.

Solution

The practice extended its Greenway PrimeSuite solution with the PrimeMobile solution, which is based on mobile technology from provider IQMax and runs on Windows Mobile® phones.

Benefits

- Halves development time and costs
- Increases flexibility, cuts training time
- Boosts revenues approximately 20 percent
- Enhances the quality of medical care
- Eliminates paper-based charge notes and complex coding

“If I’m talking to a patient, I can pull relevant information on that patient wherever I am, even if I’m at home. That makes me a more effective physician.”

Dr. Barry Harris, Surgeon, Carrollton Surgical Group

Carrollton Surgical Group used an electronic health record (EHR) and practice management solution to access patient information and enter coding for invoices within the practice. Physicians, however, spent most of their time at the local hospital. Carrollton Surgical Group turned to its EHR provider, Greenway Medical Technologies, for a solution that would give its physicians mobile access to the EHR. Greenway teamed with IQMax to provide the PrimeMobile solution, which works on any Windows Mobile® phone. Physicians can enter information from the hospital and access their schedules and patient information from home or elsewhere. Because the practice captures all relevant billing information, revenues have risen about 20 percent. By using IQMax technology, Greenway delivered a more robust and feature-rich solution in half the time—and for half the cost—of an in-house developed solution.



What is Your Experience?®



“When the surgeons provided us with the notes ... we would spend hours trying to decipher the content and properly capture the charges. We knew that we weren’t capturing everything for which we should have been billing.”

Jan Zeis, Practice Administrator,
Carrollton Surgical Group

Situation

The six physicians and the physician’s assistant on staff at West Georgia’s Carrollton Surgical Group experienced the problems common to most medical practices. With their schedules constantly changing, it was often difficult for them to know which patients they were scheduled to see the next day, whether they had openings to accommodate urgent cases and procedures, and whether their colleagues were available for consultations.

Although the Carrollton Surgical Group successfully used a leading integrated electronic health record (EHR), practice management, and interoperability solution—PrimeSuite® from Greenway Medical Technologies—to streamline the clinical, financial, and administrative workflow within its practice, it did not have a mobile strategy to help physicians while they were away from their office computers and unable to log in to their work accounts. Those problems were exacerbated by the fact that physicians treat patients not only at their practice, but also at the local hospital. Inpatient lists were maintained in the hospital’s system, and the Carrollton Surgical Group physicians had no easy, automated way to access them. When physicians arrived at the hospital, they used a computer at a nurses’ station or other location to update their paper schedules—and then had to make sure they didn’t lose the paper as the day progressed.

Tracking the schedules for patients was one major concern; tracking the appropriate billing codes for those patients after they’d been seen by a Carrollton Surgical Group physician was another. Again, within the practice, the PrimeSuite solution made it easy for physicians to capture the necessary patient notes and billing codes immediately after they saw a patient, ensuring that the medical record was complete and up-to-date, and that the patient’s insurance provider or

other payer would be invoiced appropriately for the patient’s care. At the hospital, however, physicians had no easy access to PrimeSuite—which, given their medical specialty as surgeons, accounted for the majority of their patient interactions.

The billing staff was tasked with transferring the doctors’ handwritten notes and charges into the EHR. When physicians provided the billing staff with the notes they had taken during hospital rounds—sometimes days after those interactions had taken place—the billing personnel then had to look up the appropriate billing codes, which could consume at least an hour of their time each day. If the manual records were incomplete, the billing staff had to work with physicians to reconstruct the information.

“When the surgeons provided us with the notes they had taken while on rotation, we would spend hours trying to decipher the content and properly capture the charges,” says Jan Zeis, Practice Administrator at Carrollton Surgical Group. “We knew that we weren’t capturing everything for which we should have been billing.” According to Zeis, not having a mobile solution that integrated with the EHR resulted in the failure to capture approximately 20 percent of charges—and unknown losses of revenue to the practice per year.

Solution

Carrollton Surgical Group needed to extend its existing integrated EHR, practice management, and interoperability solution to include hospital as well as practice information, and it needed to make all of that information available to physicians—for reviewing, entering, and updating information—from wherever they were: at home, at the hospital, at the office, or anywhere in-between. To do so, Carrollton Surgical Group turned to Greenway Medical Technologies. That company, in turn, teamed with IQMax, which,

“I haven’t seen anything better than the IQMax and Greenway Medical solution.”

Jan Zeis, Practice Administrator ,
Carrollton Surgical Group

through its enterprise mobile platform and suite of mobile applications, is a leading provider to healthcare technology companies. Greenway adopted “private label” versions of IQMax’s mobile products and integrated them with the Greenway PrimeSuite solution to deliver its own mobile solution, PrimeMobile. Carrollton Surgical Group became one of the beta-testing sites for the ISV solution PrimeMobile, and the production version of the solution is now in use there and at other medical practices across the United States.

Greenway’s PrimeMobile solution, which uses technologies from Microsoft as well as from IQMax, gives Carrollton Surgical Group physicians and the physician’s assistant access to information on hospital inpatient rounds and outpatient schedules; patient care data, including lab tests; and coding information for invoicing—all from their Windows Mobile® phones. Rather than requiring a specific hardware device, PrimeMobile works from the Windows Mobile phones that the Carrollton Surgical Group professional staff members already use, including Samsung i760 and AT&T 8525 phones.

Using the phones, the medical practitioners have the ability not only to view information, but also to add or change information. For example, they can change their schedules, make notes regarding patient status, and enter the appropriate codes for billing.

The IQMax portion of the solution mediates between the hospital system and the Carrollton Surgical Group practice. Information on a physician’s hospitalized patients is sent securely from the hospital information system to the IQMax servers, and then routed both to the PrimeMobile software on that physician’s mobile device and to the PrimeSuite solution on his or her desktop computer. Information that originates within the practice is similarly routed to the IQMax

servers and, from there, to the physician’s phone.

To ensure the security of patient information, all data is encrypted during transmission using the HTTPS Internet security protocol. Data is encrypted on the Windows Mobile phone using Windows Mobile AES encryption. Additionally, the Microsoft .NET Compact Framework transmits data securely in the background, allowing the physicians to use the PrimeMobile application without any delays or lags for encryption.

If a phone is stolen or compromised, patient data remains inaccessible. The IQMax technology protects the phone by automatically logging the user out of the application after a period of inactivity, and for further security, the Windows Mobile software enables users to restrict access with password protection.

The Carrollton Surgical Group professional staff members use Greenway’s PrimeMobile to check their schedules from home, from the hospital, or wherever else they happen to be. Notes on patient care can be made immediately after seeing a patient, while the information is fresh in their minds, and coding for patient charges can be similarly entered immediately after a patient visit or procedure. When the physicians enter billing code information into PrimeMobile, it is routed through IQMax to the PrimeSuite installation at the Carrollton Surgical Group practice, where the billing staff reviews and posts the charges.

“I haven’t seen anything better than the IQMax and Greenway Medical solution,” says Zeis. “These companies are 100 percent behind this solution. They are extremely sensitive to what we want and have been since the beginning. PrimeSuite was an extremely valuable part of our practice

“We liked the technology’s use of Windows Mobile. It meant that we wouldn’t burden our customers with having to buy a specific device.”

Dr. Jim Ingram, Chief Medical Officer,
Greenway Medical Technologies

before—now, it’s become even more important to us.”

Benefits

The *PrimeMobile* solution is helping the professional and administrative staff at Carrollton Surgical Group to boost revenues and the quality of patient care. And, with the help of IQMax, Greenway created the solution faster and more cost-effectively than it could have otherwise.

Cuts Development Time and Cost 50 Percent

Using IQMax technology, Greenway delivered the solution in half the time—and for half the cost—of in-house development and created a more robust and feature-rich solution than it originally planned.

“We faced two challenges in the development of *PrimeMobile*,” says Dr. Jim Ingram, Chief Medical Officer, Greenway Medical Technologies. “We needed to move information between *PrimeSuite* and the mobile device, and we needed integration between *PrimeSuite* and hospital information systems. While we could have developed the hospital interfaces and other elements in-house, this was a massive undertaking—and IQMax had already developed an elegant solution to these issues, while also providing a feature-rich platform on which to offer a mobile healthcare solution.”

Increases Flexibility, Reduces Training Time

Ingram and Greenway were also impressed by IQMax’s choice of the Windows Mobile software for its solution. “We talked to a variety of mobile technology vendors,” says Ingram. “The IQMax technology was more flexible and would work more easily with our solution. We liked the technology’s use of Windows Mobile. It meant that we wouldn’t burden our customers with having to buy a specific device—whether a PDA, pager, or cell

phone—to run our solution. The market was converging on smartphones, and with IQMax and *PrimeMobile*, our customers could use the Windows Mobile phone of their choice.”

The use of Windows Mobile—which has an interface familiar to users of the Windows® operating system—also required less customer training and, thus, faster customer adoption. “The familiarity of Windows Mobile definitely helps,” says Dr. Raul Zunzunegui, a surgeon with Carrollton Surgical Group. “We just needed a demonstration of the software and we were up and running.”

Boosts Revenues About 20 Percent

Revenues at Carrollton Surgical Group are up approximately 20 percent thanks to *PrimeMobile*, according to Zeis. She attributes the gain to faster and more accurate coding when physicians use the solution. Instead of waiting until the end of the day or week to review patient records and report billing charges, physicians now have the ability to input charge codes within minutes of seeing their patients. They can capture charges that might have eluded them otherwise, and the solution’s drop-down menus help them to code more accurately, both of which contribute to higher revenue.

Meanwhile, because the billing staff members receive information with the correct charge codes already included, they don’t have to look up those codes as they did previously, thereby speeding the invoicing process and the resulting cash flow. Donna Powell, Billing Specialist, estimates that she saves at least an hour per day on invoicing thanks to *PrimeMobile*—time that she uses to track insurance claims or other unpaid bills, contributing even more to cash flow.

“With *PrimeMobile*, we get faster and more accurate invoicing information from our doctors’ hospital activities,” says Zeis. “Since we are a surgical practice, hospital activities

For More Information

For more information about Microsoft products and services, call the Microsoft Sales Information Center at (800) 426-9400. In Canada, call the Microsoft Canada Information Centre at (877) 568-2495. Customers who are deaf or hard-of-hearing can reach Microsoft text telephone (TTY/TDD) services at (800) 892-5234 in the United States or (905) 568-9641 in Canada. Outside the 50 United States and Canada, please contact your local Microsoft subsidiary. To access information using the World Wide Web, go to: www.microsoft.com

For more information about Greenway Medical Technologies products and services, visit the Web site at: www.greenwaymedical.com

For more information about IQMax products and services, visit the Web site at: www.iqmax.com

For more information about Carrollton Surgical Group services, call (770) 834-3336 or visit the Web site at: www.carrolltonsurgical.com

account for 70 percent of our practice; so this is a major benefit for us.”

Enhances the Quality of Medical Care

The billing staff isn't the only part of the Carrollton practice that saves time. The physicians and physician's assistant also save an hour or more per day by not having to track down schedules and manually record patient charges. That is time they invest in providing more effective patient care.

“If I'm making rounds at the hospital, I can pull a patient's lab results on *PrimeMobile* and have them available right on my Windows Mobile phone,” says Dr. Barry Harris, a surgeon with Carrollton Surgical Group. “If I'm talking to a patient, I can pull relevant information on that patient wherever I am, even if I'm at home. That makes me a more effective physician.”

Even as prosaic a matter as scheduling becomes an opportunity for more effective patient care, thanks to *PrimeMobile*. “I have more control of my schedule now because I always have up-to-date schedule information with me,” says Harris. “That means I can make more intelligent decisions about when and how to schedule consults or additional procedures. I can be more effective in serving my patients.”

Windows Mobile

Windows Mobile brings the power of the Windows operating system to mobile devices, helping businesses and their mobile employees stay connected while on the go. Windows Mobile runs mobile versions of Microsoft programs, including Microsoft Office Outlook® Mobile, Internet Explorer® Mobile, Pocket MSN®, Windows Media® Player Mobile, and Microsoft Office Word Mobile, PowerPoint® Mobile, and Excel® Mobile. With Windows Mobile, information workers get powerful software combined with the familiarity of Windows. Combined with available service plans and connectivity options, Windows Mobile-based devices, available from 42 device makers and 68 mobile operators in 48 countries, can be used to make calls, send e-mail and instant messages, surf the Web, and access critical business information even when users are away from the office.

More information about Windows Mobile can be found at: www.microsoft.com/windowsmobile

Software and Services

- Windows Mobile 5.0

Hardware

- Samsung i760
- AT&T 8525

Partners

- Greenway Medical Technologies
- IQMax