



Case History

ibml Document Scanning Solution Helps Wyoming Medical Center Move To Electronic Medical Records

Hospital Reduces Labor Costs by 33 Percent with ibml Scanning Solution

The Situation

Over the past century, Wyoming Medical Center has blazed a trail for the people of Wyoming, becoming the state's largest, most comprehensive healthcare facility.

Today, Wyoming Medical Center is a 205-bed not-for-profit (501c3) acute care hospital in Casper, Wyoming, in the center of the state. Its campus covers approximately four city blocks with 719,000 square feet of space. With its 150 physicians on staff, Wyoming Medical Center offers 50 specialties with two Centers of Excellence: The Heart Center of Wyoming and the Wyoming Neuroscience and Spine Institute. Both centers have received national rankings and recognition for quality measures, outstanding care and service.

As Wyoming Medical Center grew, so too did its records requirements. Wyoming law states that medical records need to be kept 10 years, but Wyoming Medical Center had records from when the hospital opened around 1910. In addition to its own records, the hospital inherited records of physicians who retired and records from a shuttered health clinic.

In all, the hospital stored more than 13 million pages of patient files in a 5,000 square-foot records room located underneath a parking structure. The problem was the parking structure was slated for destruction in 18 months. With no other space on campus large enough to house the records and a move off-site sure to be costly and fraught with logistical difficulties for retrieval, Wyoming Medical Center decided that imaging the files was the best way to vacate the storage facility while still preserving the records.

The Solution

In late 2006, Wyoming Medical Center implemented a document management system from McKesson called the Horizon Patient Folder (HPF). The system was designed as a first step toward electronic medical records. With HPF, discharged records are scanned and indexed within 24 hours of patient discharge, eliminating the need for paper storage; scanned records are destroyed 90 days after discharge, halting the addition of records to the medical center's Health Information Management Service (HIMS). Users can retrieve images from a PC within seconds of a inquiry. Physicians like the ability to complete records online and retrieve records from the hospital, their office or even their home.

Once the process for scanning and indexing current records became seamless, the hospital's focus shifted to managing records discharged prior to implementing HPF. The HPF system had enough storage space to hold all of the center's old and new records. Initially, Wyoming Medical Center's HIMS hired temps to scan the old records into the HPF system. But productivity was hindered by space and budgetary constraints. While the hospital's document management system used three production scanners, they were only capable of imaging a maximum of 10,000 to 12,000 documents per day. What's more, the process of guarding against double-feeds was laborious, requiring more time spent indexing records than actually scanning, according to Nick Belveal, RHIA, director of HIMS, Wyoming Medical Center. "Because our scanners were not good at detecting double-feeds, it was an extremely slow process," Belveal added.

At the rate it was going, it would take the center five years to scan all of its old records.

Worse, the piles of records were impacting the hospital's day-to-day operations. "They slowed down our operations tremendously," Belveal said. "Loose-sheet filing by hand is much slower than electronic filing. Plus, searching for records on foot can really be slow with 5,000 feet of records."

In an effort to increase scanning productivity, Wyoming Medical Center looked for technology solutions. After an extensive search, the center selected the ImageTrac III scanner from Birmingham, Alabama-based ibml. Designed for high-speed scanning, the ImageTrac III scans about 257 documents per minute and 13,107 pages per hour. Other features include barcode recognition, form recognition and ultrasonic page recognition, which helps eliminate double-feeds. The ImageTrac III scanner immediately stops when a double-feed is detected, preventing more pages from being scanned. The hospital's old scanners only beeped when double-feeds were detected and often fed several more pages before the scanners could be stopped. This

made it hard to determine which pages were double-fed and which were scanned correctly, requiring rescanning of the batch.

Belveal said the hospital chose the ImageTrac scanners because, "The speed is impressive, the double-feed detector works well and the exporter makes it easy to re-scan documents."

The hospital expected the ImageTrac III to make a significant impact on the scanning of its old medical records, ultimately allowing for the elimination of its temps within a year, with long-term reductions in staff through attrition. ibml did not disappoint.

Results

One advantage of the ImageTrac III for Wyoming Medical Center was the elimination of manual page counting. With the hospital's old scanners, each page had to be counted to ensure two pages weren't pulled through at the same time during the scanning process; the hospital needed to safeguard the quality of the scanned record. But this also had a big impact on productivity: scanning accounted for 8 percent of the hospital's processing time, while counting pages accounted for 70 percent. Eliminating this step, coupled with an increase in scanning time and speed, resulted in a productivity spike of 800 percent.

By increasing the amount of time spent scanning medical records, rather than counting pages, Wyoming Medical Center was also able to significantly boost its daily production rate from 7,000 pages per day to an eye-popping 52,000 pages per day. The difference of pages the hospital scanned in a six-month period totaled more than 5.4 million pages.

Another benefit of the ImageTrac III scanning platform was its barcode recognition capabilities, which allow for documents to be identified and indexed automatically through the use of a barcode. This process results in less manual intervention.

ibml's page recognition functionality was another benefit to Wyoming Medical Center. Distinct forms can be automatically recognized and indexed. This increases the accuracy of page identification, reduces manual intervention and improves overall productivity.

Additionally, with all of its medical records available online, fewer personnel are needed for releasing information, running records to the emergency room and hospital floors, or faxing information to physician offices. This will provide ongoing labor cost savings.

Overall, the ImageTrac scanners have enabled the hospital to reduce its scanning and indexing staff by 33 percent -- representing about \$75,000 to \$100,000 a year in labor costs -- while clearing out nearly 1,500 square feet of records. Belveal adds that the ImageTrac solution will pay for itself in the first two years as a result of reduced labor costs and save Wyoming Medical Center another \$350,000 over a five-year period.

The Bottom Line

"A lot of people are talking about electronic medical records, and thanks to ibml, Wyoming Medical Center already has taken a big step in that direction," said Belveal. "As a result of implementing ibml scanners, WMC has maximized productivity, reduced our document management labor costs by 33 percent and decreased our long-term operations expenses."

"It has been a great experience with ibml," Belveal said. "The installation was easy, the support has been good and we have found that the scanners do what ibml said they would."

Belveal added that once all of the hospital's records are online, "they will be at the fingertips of our staff and physicians, increasing operations productivity and improving patient care."

Benefits

- Improved scanning productivity by 800 percent
- Reduced labor costs by 33 percent
- Automatic document orientation and multi-feed detection
- Ability to scan multiple patient folders at one time
- Reduced document preparation

SoftTrac, ImageTrac and DocNetics are registered trademarks. DynamicTIFF is a trademark of Imaging Business Machines, LLC.

