

case study



Altoona Hospital

Altoona Hospital is using DocuWare to successfully manage outpatient medical records. Document retrieval time has been substantially decreased giving medical personnel faster access to important information and improving the patient-doctor relationship. The records no longer need to be microfilmed, reducing the time frame between processing and transferring them to long-term storage. More efficient work processes have increased job satisfaction, which has been reflected in lower personnel costs.

Altoona Hospital is dedicated to ensuring that high-quality; compassionate healthcare services are available, affordable and accessible to the people it serves. Established in 1885, the hospital has grown into a 350-bed facility that serves a five county region, providing basic hospital services, as well as a trauma center. Will Showalter, Chief Information Officer for Altoona Hospital, began looking for a software package that could help the Outpatient Medical Records department improve its workflow process and effectively manage a mounting volume of paper records. After evaluating several systems, Altoona decided to implement DocuWare.

Documents

The hospital's outpatient medical files are made up of all types of documents, such as outpatient surgeries, same day surgeries, ER observations, chemotherapy treatments, dialysis reports and other documents. The files range in size from a few sheets to hundreds of pages. With 100 plus outpatient procedures performed a day, the staff is constantly busy filing new procedures and pulling patient medical history requests.

Work Process

During outpatient registration, the patient is interviewed and basic information such as name, address and insurance data are input into the hospital's main system, INVISION. After the procedure, the hard copy medical record is received in the Outpatient Medical Records department where it is put through a quality assurance process. The document is checked for completeness and the pages are placed in a basic order. Incomplete records are sent back to the attending physician. A coversheet containing basic patient information is printed from the INVISION system and becomes the top page of the medical record for that episode of care. The record is filed into the permanent record by patient ID number and visit number.

The hard copy file is stored for two years before being converted to microfilm. Retrieval requests are constant and document retrieval time is about 12 minutes per file. Once located, the original file is signed out, allowing the records staff to maintain control of the files.

Because Altoona's medical records need to be maintained for life, the long-term volume of records the department needs to store seems astronomical.



IT Situation

Altoona hospital has an IT staff of 25 who maintain 1200 work stations and 55 servers. There are 40 workstations in the Outpatient Medical Records department.

Solution Requirements

Altoona's Outpatient Medical Records department wanted to find a cost effective software solution to help them automate their workflow process. Will Showalter and his staff searched for a solution flexible enough to capture, index and store documents in such way that the information could be stored and managed in a stand alone database or be imported into the hospital's INVISION system at some point in the future. The department also wanted a document imaging solution that had electronic workflow functions with document routing features such as notations and electronic stamps.

Solution

IMR Limited, an Authorized DocuWare Partner in Harrisburg, Pennsylvania installed Altoona's DocuWare solution, which consisted of a DocuWare System License, five READ-ONLY licenses, eight



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Chief Information Officer,
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FULL FUNCTION licenses and the DocuWare modules ACTIVE IMPORT and CD-MAKER. Additionally, one Canon 5080 color scanner and three black and white Canon 5020C scanners were purchased as part of the solution.

"Implementing DocuWare forced us to take a closer look at how we processed our documents and pushed us to redefine and streamline our processes," said Will Showalter.

Over the years varying coversheets had evolved from departmental routing slips. The first change Altoona implemented was to standardize these coversheets so the information on them could be used as the index fields in the DocuWare file cabinet. Prior to scanning, the outpatient medical records still go through the same mini-assembly and quality assurance check. The only difference is that now the quality assurance staff places a barcoded coversheet between each subtype of document in the record, to further automate the indexing process. A zonal OCR recognition software, was integrated as part of the solution to read the text and barcodes on the coversheets and automatically index the documents. Once the documents are scanned and indexed they are reviewed by the staff.

The Outpatient Medical Records department moved to the DocuWare system in July and by November they had successfully scanned all of their records from January 1, through the end of June. Today, requested medical records are instantly retrieved from DocuWare and the needed pages are printed for the requesting physician.



Altoona Hospital's radiology group is available to perform tests before an outpatient procedure is done.

The Benefits in Detail

User Benefits

Since implementing DocuWare, document retrieval time has been reduced from 12 minutes to just seconds and physicians and healthcare workers have fast access to important medical information. The DocuWare system also sped up document input time. Because scanning and automatic indexing is so much faster than filing, the staff can now be more proactive in addressing other issues. Additionally, re-filing paper records has been eliminated, increasing job satisfaction and lowering employee stress levels.

Department Benefits

On a department level, reduced retrieval time means the same number of employees can do more, enabling growth without adding personnel. Medical records can be looked up in many different ways, improving workflow efficiency and increasing productivity.

By scanning outpatient records, the department gained more storage space and eliminated the hassle of having the older records microfilmed, which means that the time frame between processing the records and transferring them to long-term storage was shortened significantly, improving the hospital's access and ability to manage their records.

"DocuWare is a very cost-effective imaging capturing software that fits our department's needs as a complete storage database and retrieval system," said Will.

Today, when a record is requested, only the pertinent information is printed, not the entire chart, making it easier for the attending physician to quickly review the information he or she needs. Faster access to patient medical history spills over to faster answers to patient questions, improving the doctor-patient relationship and helping Altoona Hospital meet its goal of providing high quality health care.

Hospital Benefits

On a broader level, the efficiencies gained by using DocuWare will easily justify the investment and have already contributed to the overall success of the hospital. The solution addressed the shortcomings of storing and accessing paper medical records without changing established healthcare business processes, which in turn, reduced the learning curve and training costs of adopting a new information management system. The reduction in job stress has resulted in a more satisfied work force, which means less turnover and reduced personnel costs, an important factor in the medical field where it is difficult to find qualified personnel.

Outpatient records are now much more secure and DocuWare's security features help the hospital meet the privacy requirements established in the Health Insurance Portability and Accountability Act or HIPAA law.

"Once we caught up with the scanning of our backlog of outpatient charts, we really saw major time savings in chart retrieval, filing time and space – all lending more time for our employees to do what they were hired for – provide better service to our doctors and nurses who in turn can provide our patients with a higher level of care," said Vicky Patterson, Director of Health Information Services.

Most importantly, DocuWare is helping Altoona Hospital achieve its stated goal of ensuring that high-quality compassionate healthcare services are available, affordable and accessible by contributing to the development of an integrated healthcare system that allows its employees to dedicate their talents and skills to improving the health status of the community.

The Task

- Cost effective
- Flexible architecture
- Workflow automation
- Document routing features

The Solution

- DocuWare
- ACTIVE IMPORT
- CDMaker

The Benefits

- DocuWare helps Altoona meet HIPAA privacy requirements and avoid legal exposure
- Physicians have better access to information allowing them more time to focus on providing quality health care
- Faster access to medical records means faster answers for patients improving doctor/patient relations. This helps build goodwill in the community towards the hospital
- Productivity is improved allowing for growth without adding personnel
- Less filing, increased job satisfaction and lowered stress levels – this means less turnover and overall reduction of personnel costs for recruiting and training
- The solution addressed the shortcomings of manually storing and accessing paper medical records without changing established healthcare business processes – this means less time spent training employees
- Reduced paper handling (from capturing, retrieving to storing) allow employees to focus on core job responsibilities