ChartWorx Case Study: Digestive Disease Consultants

The Situation

True Cost of Short Cuts

Digestive Disease Consultants, an Arizona-based practice of six physicians, had recently converted to an Electronic Medical Record (EMR) system. While some practices continue to use paper files in tandem with EMRs, Digestive Disease Consultants decided it was necessary to digitize all of its active patient charts in order to fully optimize the system and eliminate steep paper handling costs. This would prevent the doctors from inserting new information into a paper file, which wouldn't match the information provided in the EMR system.

Digestive Disease Consultants originally opted to scan its paper charts into the new EMR system with its own administrative staff and scanner. Shortly after starting the process, staffers realized the time commitment was too great. They needed professional help in order to resume their regular duties and keep the practice operations running smoothly.

After seeking several quotes from document management firms, Digestive Disease Consultants selected a company that appeared to be the cheapest – a Texas-based firm which required the charts to be trucked from Arizona to Texas.

The *true cost* of this decision was soon realized. While shipping the charts offsite seemed like the most cost-effective method at the time, it presented several issues:

- The Arizona-based practice had to request charts from Texas as patients made their appointments. This process could take more than six weeks, which created an obvious strain on administrators and doctors.

- Many of the scanned files did not integrate correctly with the practice's existing ChartCapture system (a digital repository and viewer for the digitized charts).

- Many scans had an inconsistent, poor quality. Additionally, the company scanned all of the images in black/white when many needed to be scanned in color.

- Communication issues stalled the entire scanning process, and charts were lost in the mix.

The ChartWorx Process
Quality, Consistency & Flexibility

After two attempts to digitize the patient charts, Digestive Disease Consultants contacted OptiScan to complete the project using its proprietary ChartWorx System. In just 10 months, OptiScan seamlessly digitized all of the practice's 19,000 active charts, and they were integrated with the existing ChartCapture repository.

Here's how the process worked:

- **Personnel:** OptiScan placed two permanent employees at the Digestive Disease Consultants facility throughout the scanning process. They were onsite during all business hours to prepare chart pages, scan pages, ensure a smooth workflow, answer questions and locate needed files either physically or electronically.

- **Environment:** OptiScan established a ChartWorx Station at the facility, which consisted of an onsite computer with the necessary software and scanner. The station typically requires two 5-foot tables,[1] however, OptiScan staff made the process work with one 8-foot table due to space constraints.
  (Note: For large-volume scanning projects and tight turnaround times, additional tables may be needed. Empty offices, conference rooms or space available in the records area can be used for the ChartWorx Station.)

- **Preliminary Steps:** OptiScan loaded the patient list data into the onsite ChartWorx Station. The list contained patient names, birthdates and ID numbers. OptiScan provided practice administrators with an internal web interface to easily and selectively mark the patients that required scanning. The ChartWorx Station then generated barcode patient cover sheets, which are used to separate the charts when scanned as a large stack. The sheets also provide automatic index information for the scanned chart pages.

  Practice administrators went through each shelf and marked the charts in alphabetical order by practice physician. Then, they pulled the charts for scan preparation. Within the same day, the pulled charts were scanned.

- **Scanning:** OptiScan staff utilized a 60-page per/min scanner (higher speed scanners will be used for facilities that allow higher daily preparation volumes). The ChartWorx Station automatically marked and separated each section/tab-break in the chart when a tab sheet was detected or a special barcode sheet was encountered.
  (Note: If images can be represented accurately in black/white without compromising the content of the image, OptiScan will scan the file in black/white. This is the quickest way to scan a file and the most efficient use of digital storage. However, when necessary, OptiScan will create a high-quality grayscale or color scan.)

- **Chart Processing:** The charts were digitally constructed for import into ChartCapture, to be viewed with the gMed Practice Management System. Digestive Disease Consultants required each patient to have 14 separate sections, so ChartWorx created 14 separate PDF files for each

[1] Organizations with larger scanning and prepping areas will experience faster completion times.

patient (9 sections black/white, 5 sections in color).

Using a secure VPN connection to the OptiScan headquarters in Phoenix[2], the images were first quality-checked and enhanced (if necessary). Second, the patient numbers and section breaks were verified for accuracy. Then, they were exported to multi-page PDFs. The files were named with the appropriate section and automatically imported into ChartCapture using a special bulk import function. These charts were then available for view in ChartCapture or gMed systems. This process from preparation, scan and process to ChartCapture import took between 24 and 36 hours.

- **Monitoring Progress:** OptiScan provided an internal web address to the Chartworx Webserver, allowing practice administrators to view chart processing statistics and determine the processing status of any chart. If a physical chart is ever needed during the processing stage, OptiScan would immediately know the location of the box and be able to retrieve it. Additionally, these monitoring capabilities ensured all charts were accounted for.

- **Post Processing:** Once all patient charts were uploaded into ChartCapture, they were professionally shredded, clearing out much-needed space in the facility.

The ChartWorx Difference

Results

OptiScan completed scanning 19,000 charts in 10 months for $7,200 per month. Figure 1 illustrates the scanning costs compared to the average paper-handling costs of a similar-sized practice.

Figure 1

ChartWorx Costs vs. Paper Handling Costs
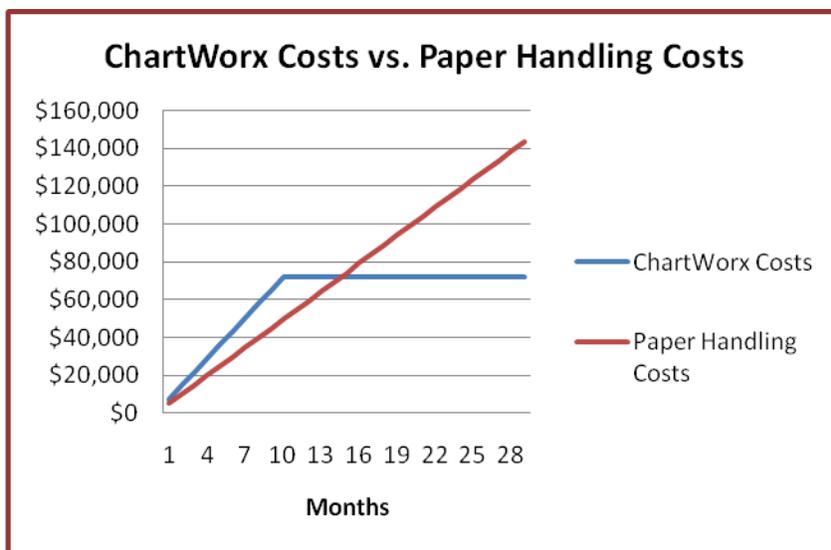
Project Stats:

- Total pages: 1.3 million
- Total charts: 19,000
- 1 scanner
- Speed: 60 pages/min
- Cost per page: $0.05
- Cost per chart: $4

Staffing Stats:

- 1 OptiScan Operator
- 2 OptiScan Preppers
- 8-hour shifts
- M-F

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[2] The practice's files aren't electronically transferred to the Phoenix headquarters. The VPN allows OptiScan to remotely run and monitor the onsite ChartWorx station.

- 10 months

Key Capabilities & Benefits

OptiScan helped Digestive Disease Consultants achieve a fully integrated EMR system with ease, ultimately saving the practice thousands of dollars a month in paper handling costs.

While a cheap price tag originally lured Digestive Disease Consultants to test out other options, the practice quickly realized that it was sacrificing chart access, quality and image consistency. ChartWorx benefits of note include:

> "OptiScan was like a breath of fresh air during our EMR conversion from paper to electronic."
>
> ~ Brenda Harding, CMPE
>   Practice Administrator

- All files are scanned by experts who have the technical know-how to optimize image quality, speed and image size footprints.

- The practice has instant access to all patient charts during the scanning process. In this particular case, *the lag time for requesting files had gone from six weeks to less than six minutes.*

- The process of going completely paperless helps rid the practice of inefficiencies as well as the costs associated with paper handling.

- OptiScan can provide onsite scanning professionals to practices around the country.

Learn more: www.optiscan.net