

# **Using Document Imaging to Make Healthcare “Better Business”**

A Canon White Paper

**Using Document Imaging to Make Healthcare “Better Business”****Executive summary**

So much has been written about the overload of paper in healthcare that the inefficiencies it creates are legendary. Nearly *75 million pages* of medical claims—mostly paper-based—that are processed *every day* in the United States.

What many healthcare providers may not realize is that—in addition to eliminating paper—Document Imaging makes healthcare *better business*. It helps providers across the healthcare spectrum operate more efficiently, release the revenue-generating potential of space formerly used for document storage, easily meet the demands of the privacy and security areas of HIPAA without onerous procedures and expense, improve response times to patient inquiries, and boost staff satisfaction by making the day-to-day work of serving patients easier.

This white paper explores the business benefits Document Imaging brings to healthcare, and outlines a simple plan providers can use to begin reaping these now.

**The financial rewards of document imaging**

Document imaging helps healthcare practices improve financial performance, often as soon as it is implemented. One reason is that archiving, retrieving and sharing paper-based healthcare information is a time-consuming process that often leads to misplaced documents, lost files and accessibility conflicts.

In fact, a study performed by the University of Massachusetts Medical Center found that 11% of documents needed to process claims each month were missing. This amounted to 146 documents per month, with lost billings estimated at \$501 each—equating to more than \$73,000 per month.

Practices also can immediately eliminate the time and expense of pulling charts. Studies performed by the Medical Group Management Association (MGMA) and others show that it takes a well-run healthcare practice about 6 minutes to find and pull a chart and then re-file it.

Assuming a practice has 100 paper documents to be filed daily, the time expended is  $100 \times 6$  minutes = 600 minutes or 10 hours per day. At a personnel cost of \$15 per hour (including benefits), that equates to \$150 per day  $\times$  260 working days per year, or \$39,000 per year.

Any practice can easily perform this analysis based on the number of charts it pulls daily and its hourly personnel expenses. A hospital—which operates 365 days per year and has many more charts and documents—saves far more. In fact, Memorial Sloan-Kettering Hospital reported saving \$1.2 million per year by moving from paper to digital documents.

The financial benefits born through Document Imaging can be realized across any practice, clinic, hospital or care facility. Financial rewards commonly come from:

- Transforming patient chart rooms into revenue-producing space
- Eliminating the costs of off-site storage for archived and duplicate patient charts
- Reducing discharge-to-bill time through faster access to records, the ability for multiple people to access and use the chart at the same time, and the elimination of lost or misplaced files and documents

### Using Document Imaging to Make Healthcare “Better Business”

- Eliminating paying an outside firm to fulfill requests for copies of patient charts from patients, health plans and other providers. *Healthcare Informatics* magazine reported that San Jose Medical Center was able to generate \$100,000 per year after a document imaging and management system enabled the hospital to process record requests in-house, while Memorial Sloan-Kettering was able to generate \$380,000 per year.

#### **Happier patients, happier staff**

The efficiencies gained using electronic versus paper charts also improve patient service and boost staff morale. Because staff can access information quickly and easily, patient questions can be answered more promptly. One large metropolitan hospital found its turnaround time for processing release of information requests decreased from 48 hours to less than 3 minutes. Another was able to reduce the amount of time nurses and other clinical staff had to spend on paper-related tasks by 50%, freeing that time to devote to patient care.

Electronic documents also enable authorized doctors and other clinical staff collaborating on a patient's care to view the patient's chart at the same time, eliminating delays in information sharing. Simultaneous chart access also helps to accelerate the discharge-to-billing process, as those involved in abstraction, coding, deficiency correction, dictation and insurance processing can perform tasks at the same time. Patient bills are more timely and accurate, and issues with insurance claims are reduced, further promoting patient satisfaction.

#### **An affordable way to meet HIPAA requirements**

HIPAA regulations set national standards that mandate privacy and security protection for an individual's medical records and other personal health information. The “rightness” of the basic principles of privacy and security is hard to argue against. However, many physicians wonder how they can guarantee that protection when so much information is contained in paper charts that are shared among physicians and staff both within the practice and outside of it.

Document Imaging is proving to be an affordable and practical answer. Because the systems automatically track who accessed what information at what time, and enable access to be limited to those who “need to know,” they provide an easy to execute and control “audit trail” of how information is shared in the practice and outside of it. And, it is no longer possible for patients, drug company representatives, cleaning staff or others to “walk off with a chart,” whether intentionally or accidentally.

Document Imaging also eliminates the common problem of misfiled or lost documents, and makes it far more affordable to store back-up data off-site so that it is protected if there is a disaster. Thousands of dollars can be saved annually through the ability to store about 20,000 documents on a CD that cost \$1.00, or 1.3 million documents on a 40 gigabyte external hard drive that costs about \$100.

#### **A “first step” to Electronic Health Records (EHR)**

Many healthcare industry experts point to EHR systems as an answer to complying with HIPAA privacy and security, with the added benefit of making healthcare information “patient portable”—meaning a patient can easily take a copy of his chart from one health care practitioner to another.

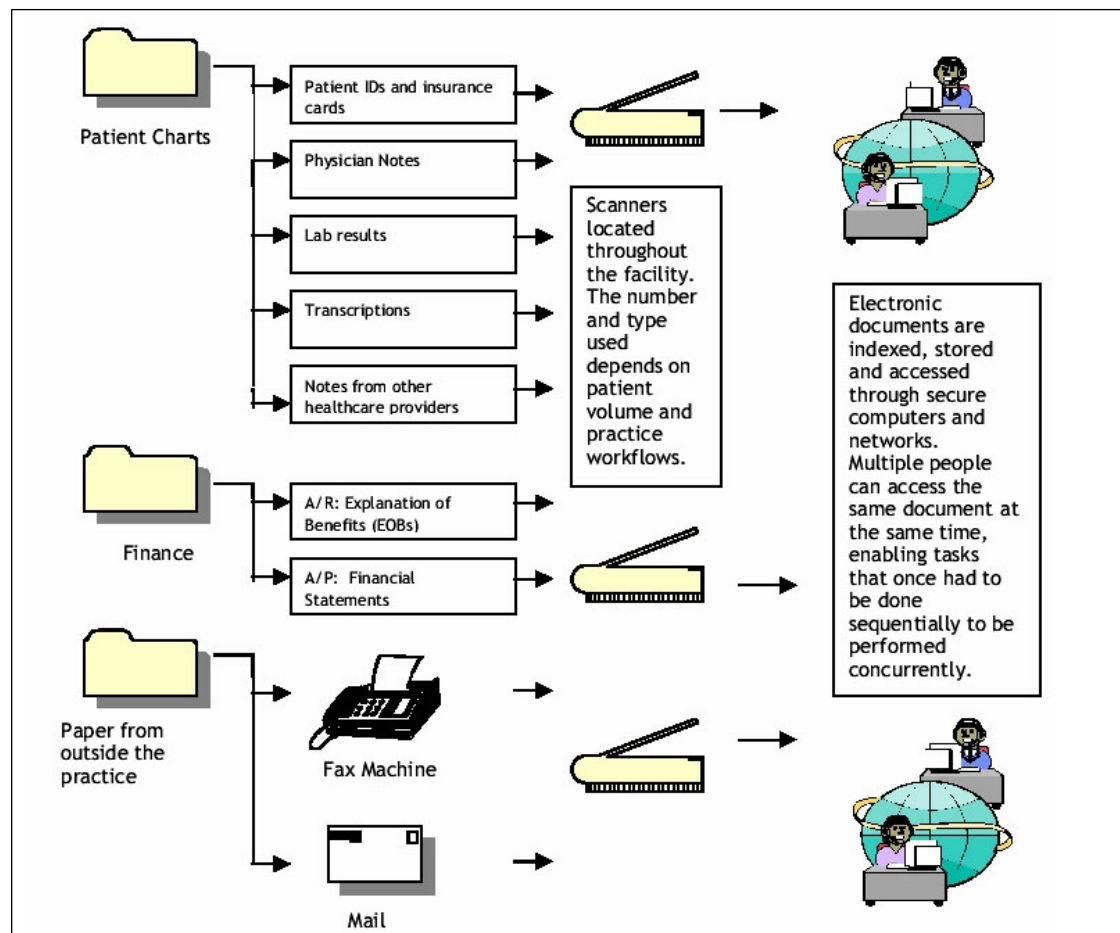
Using Document Imaging to Make Healthcare “Better Business”

However, a study released in September 2005 by MGMA showed that only 14.1% of all medical group practices use an EHR. While EHR use among practices with 21 or more physicians is stronger, at 20.7%, adoption is still low.

The MGMA study shows that cost and worries about an EHR system being difficult to use are the major barriers to adoption. Because Document Imaging systems are less expensive than full EHR systems, and can be implemented with minimal disruption to a practice, many physicians are using this technology as a first step toward EHR. A March 2005 *Healthcare Informatics* article notes that “the (document imaging) technology, nearly alone among IT investments, can reliably generate a return. Perhaps even better, many regard it as an attainable stepping-stone on the path toward the electronic health record (EHR).”

Figure One shows how Document Imaging fits easily into the natural workflow of a healthcare practice. As staff and physicians get used to working with electronic documents created through Document Imaging, they become more comfortable with moving to the complete electronic office that Electronic Medical Record software creates. The scanners purchased for the Document Imaging solution then are used to scan in paper that continues to enter the practice—from other healthcare providers, test labs, health plans, patients and other sources.

Figure One: Document Imaging Fits Naturally Into Healthcare Workflows



**Using Document Imaging to Make Healthcare “Better Business”****Reaping the rewards of document imaging**

Healthcare providers can start generating better business results through Document Imaging by following these seven steps:

- 1. Diagram your current workflow processes.** Diagramming workflow will lay out a blueprint for how to position scanners and Document Imaging software throughout your practice. It also will point to ways you can streamline processes. Document the answers to the following questions: How are paper documents created within the practice and received from outside of the practice? How do these documents travel throughout the practice as patient care is scheduled, delivered, billed and paid? How are documents shared with healthcare providers outside the practice, and among practice locations? How are you capturing HIPAA-related information, such as patient consents and information access audit trails?
- 2. Redesign workflows to eliminate steps not required if you have a Document Imaging system.** For example, the ability for multiple people to view the same chart at the same time can transform sequential processes into concurrent ones. It also eliminates the need for charts to be photocopied and faxed, couriered or mailed overnight to share information with physicians collaborating on a patient's care.
- 3. Form your return-on-investment goals.** Be specific about what you would like to accomplish. Real savings can be accrued in small ways that add up. For example, the University of Cincinnati Medical Center reported saving \$30,000 per year simply by eliminating the need for file folders and labels for the medical records room. Many physician practices have converted their file storage rooms into additional patient care areas that increase the patients that can be seen per day. Another common benefit is reduced billing cycle time via faster processing and quicker resubmission if insurance claims are denied. You might also include patient satisfaction improvements, such as reducing the amount of time patients spend waiting for staff to find information in their charts. And, achieving compliance with HIPAA security and privacy regulations should be on your list.
- 4. Get clinical and administrative staff buy-in.** All change—even change for the better—can be stressful. Your staff should understand how the document imaging system will impact the practice overall and their daily work. Have your staff contribute ideas on improving workflows, complying with HIPAA, placing scanners and other equipment to maximize efficiency, and re-using the space formerly used for paper charts.
- 5. Find a solution provider to help you select the equipment and software right for your practice.** There is no substitute for experience when it comes to improving operating efficiency. Select a solution provider who is well versed with healthcare so they can determine strategies to meet the privacy, security and data protection requirements of HIPAA.
- 6. Choose an implementation plan that works for your practice.** Different practices choose different methods for converting paper charts to electronic ones, based on their goals, patient volumes, and staff preferences. Some convert all existing records at once, while others create new patient charts in electronic form but convert existing charts over time as those charts are used. A solution provider can work with you to create a conversion plan that works best for you.

**Using Document Imaging to Make Healthcare “Better Business”**

7. **Set a strategy for paper destruction.** Solution providers also can work with you to determine optimal plans for destroying paper documents once you verify that you have successfully converted them to their electronic counterparts.

**Document scanners: The first component of an imaging strategy**

Document scanners are the on-ramp for healthcare imaging. Here are a few important factors to consider when evaluating document scanners:

**Consumer flatbed vs. Business document scanners:** Although its initial cost is higher, in the long run a business-quality document scanner is a better choice than a consumer-quality flatbed scanner. Business-quality document scanners enable busy healthcare practices to operate more efficiently, and deliver a better return on investment. Business document scanners have a document feeder to efficiently scan multiple documents instead of requiring documents to be changed manually, as consumer flatbed scanners do. They also are built more robustly to handle the demands of healthcare scanning, and offer a range of features to simplify scanning and ensure high-quality scanned images.

**Image quality:** Look for scanners designed to minimize image distortion. You might also consider advanced technology that evenly illuminates documents during scanning—even when scanning wrinkled or folded documents — and so produces better quality images. Also look for “color dropout” capability, which can be used to remove a form background for accurate data processing.

**Reliable paper-feeding:** Smooth, jam-free document feeding is an absolute must in busy healthcare practices. Advanced scanners will detect staples left in documents and stop the scanning process so that they can be removed without damaging the scanner, tearing the document or compromising the final scanned image. They also will detect “double feeds”—when more than one piece of paper goes through the scanner at a time—so that they can be corrected. Better scanners prevent double feeds in the first place with a well designed paper feeding system.

**Throughput matched to your needs:** Different scanners deliver different levels of “throughput” – the number of pages scanned per minute. Equipment resellers familiar with the healthcare industry can help you select the best throughput based on the number of documents you think you will scan in a typical day.

**Duplex Options:** Many healthcare forms, patient care documents, and business records are printed “in duplex,” meaning on both sides of the paper. To maintain an efficient workflow, look for scanners that can scan in duplex. Be sure to review both the PPM—pages per minute—and the IPM—images per minute, which includes both the front and back sides of the paper. Duplexing scanners should also offer a Skip Blank Page tool to eliminate blank pages from the final scanned images.

**Simple connectivity:** USB 2.0 is a simple high-speed plug-and-play way to connect a scanner to a computer and is the best option in many cases. Although slightly more complicated, a SCSI-III interface may be a better option in some environments with very high throughput requirements as it transfers data faster.

**Using Document Imaging to Make Healthcare “Better Business”**

**Software to enhance performance:** Ask about software compatibility when reviewing scanners. Some come with out-of-the-box scanning tools that facilitate the scanning, viewing, saving, distributing and printing of documents and some have been tested and certified with a range of other software applications.

**Canon and document imaging**

Canon U.S.A., Inc. is an industry leader in professional and consumer imaging solutions, and, through its parent company, Canon Inc. (NYSE:CAJ) is a top patent-holder of imaging technologies. This technology leadership results in systems that are designed to outperform their guaranteed specifications, delivering optimal price/performance value.

Canon delivers a complete line of DR-Series scanners that serve the document imaging needs of any size healthcare practice and budget. These feature-rich scanning solutions lead the industry in value/price and ease-of-use comparisons. They start with introductory workgroup systems priced from \$700 and designed to handle the needs of a one-to-three physician office. And, they extend to high volume production scanners priced from \$9,000 and designed for multi-facility integrated delivery networks of hospitals, clinics and physicians.

Canon works with a nationwide network of resellers who know healthcare and can help you optimize a solution based on the characteristics of your practice or facility. They can configure the right combination of hardware and software to match your current and expected patient volumes and practice workflows. They also can help you determine strategies to meet the privacy, security and data protection requirements of HIPAA.

**For more information contact a Canon reseller.**