In Search of Document Imaging Best Practices

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by Jill Burrington-Brown, MS, RHIA, FAHIMA

The number of healthcare providers implementing document imaging as a part of their electronic health record solution is on the rise. In order to help others navigate the process, the following HIM professionals offer their experiences in planning, selecting, and implementing document imaging here.

Nine HIM practitioners from eight organizations shared their organizations' experiences implementing document imaging systems through a request for volunteers posted on the AHIMA Communities of Practice.[1] HIM practitioners answered questions in three categories: patient encounters, production, and lessons learned.

Patient Encounters

What part of your organization's EHR is generated electronically, and what part is generated in paper and then scanned?

All organizations reported having some amount of data that are electronically generated. However, the amount varied. Caryl Greaves, MPA, RHIA, director of HIM at Montefiore Medical Center in Bronx, reported, "About 40 percent of our record is electronic, including CPOE, medication administration, vital signs, problem lists, and ancillary reports generated from department-specific systems such as radiology, laboratory, and pathology."

Wendy Mizel, RHIA, manager of health information services at Harris Methodist Fort Worth Hospital, said her facility includes dictated reports in its EHR. At the other end of the spectrum, Katie O'Hearn, RHIT, CCS-P, reported that Hennepin Faculty Associates scans only a few forms such as consents. It creates no paper; all the documentation is electronic. It was the only organization respondent that appears to scan minimally. All other respondents scan a considerable amount of paper.

What is your organization's policy regarding back-scanning, or scanning of old paper records?

Four organizations chose not to scan old records. One, Montefiore, scanned the old records at one hospital but did not continue the process with the other hospitals because it was not cost effective. One organization has not made a decision yet, and one organization reported abstracting certain elements from the paper record into the electronic record rather than scan old records.

These experiences suggest that scanning old records might not be worth the cost and should be evaluated carefully in the stages of planning document imaging.

If your organization does not scan old records, does it send the old paper chart to the clinician for appointments?

Most respondents reported that their departments send old records only upon clinician request. Two organizations made the charts available for a few months, then only upon request. O'Hearn noted, "The paper charts were made available for the first couple months after go live, and eventually providers were weaned from the need of the paper chart. Our delivery of charts decreased from 24 deliveries a day of a total of 500–600 charts to four deliveries of 16–30 charts per day."

DeAnn Tucker, RHIT, CCS, director of HIM at Owensboro Medical Health System, stated that after four years of imaging, it is very rare to have a paper chart requested. Greaves reported that after nine months of scanning, requests for paper charts for adult patients were near zero. The pediatric population was more difficult, and the resulting compromise was to scan the original history and physical, immunization record, and growth chart. The compromise eliminated the need for the pediatric paper records.

Organizations contemplating scanning should think through the process of providing old paper charts and have a deadline in mind for when providing the charts will be by request only. Pediatric care providers should determine what parts of the paper record are routinely referenced and plan an organized approach to scanning that data.

Does your organization scan outside records brought in by patients?

All eight organizations scan outside records brought in by patients. One scans up to 150 pages per patient. Some organizations have clinicians choose what to scan, while others scan all records provided. Most scan the records into a section called "outside records," "correspondence," or "records brought by patient."

Issues of liability are likely one of the major concerns for scanning patient-provided information. Facilities should establish a consistent response for records patients bring in from other facilities and how the media will be managed (e.g., paper, CD, USB flash drive). They must consider how best to make that information readily available to clinicians.

Production

Does your organization scan in-house or does it outsource scanning?

Seven organizations reported scanning in-house. Greaves noted that "one of the most important components of the document management system was the workflow component, which automated the entire HIM process. So it was important to have the record available online for coding and analysis within 48 hours. Trying to outsource with that timeframe was not feasible." Kathy Westhafer, RHIA, CHPS, at Christiana Care Health System, reported that the HIM staff scans select records such as emergency and EKGs and outsources the rest.

Does your organization have production standards? How did it establish them?

Six organizations reported using productivity standards. All reported using staff averages to set production standards. Westhafer added, "We did some research with other facilities that were doing document imaging and were able to do some actual simulations. We underestimated the resources involved in quality checking at first. We now understand different record types, in what condition they come to the scanning center, and how long it will take to prep them."

Other respondents noted that setting standards also had to do with how fast the equipment operated, as well as how completely the documents to be scanned were prepped by HIM staff.

HIM professionals planning a document imaging program should note that the productivity averages will likely be set from averages developed by the staff using the equipment purchased, and that as equipment varies, so will productivity times.

Does your organization perform a quality check on the scanning? What does it check?

Seven of the eight organizations have some quality control, with three checking 100 percent of the scanned documents. The rest checked from five to 10 percent of the scanned documents. Mizel's organization identified "problem prone" documents and "developed our 'core' set of documents to quality check. A sample QA process occurs on the noncore set of documents to identify any potential issues."

The majority of organizations perform some kind of quality control to ensure that records are accurately scanned. This is an important step in the document imaging process, whether all records are checked or just a random sample. Every organization should determine how much it will spend on quality control according to budget and level of risk.

Lessons Learned

What would your organization do differently if it could go back to the beginning of the process?

Tucker offered, "I would have more computer output to laser disk feeds from the beginning and more practice for the staff in prepping records to be scanned. I highly recommend ramping up on staff with temporary employees and barcod[ing] all of your forms."

Westhafer said that the organizations in her system would "revise all forms prior to implementation so they are ready for the scanning process. We also would have done more education with clinicians about the effects of handwriting in places like margins and heavily shaded areas that are difficult to capture when scanning."

Jené Brietburg-Moya, RHIT, CCP, PCS, of Presbyterian Health Plan, stated, "We now have eFax electronic documents, and we are developing a program to assist us with dropping the document directly into the scanning program without printing the record and then scanning. Not doing this at the beginning increased paper, manual labor, and additional storage."

O'Hearn noted, "I think the one thing I would change is allowing providers to pull records from the paper chart for scanning. We thought we were helping them feel better about using the EHR if they could see the old records, but by scanning the paper, we made it harder for release of information. This only happened with one provider, and I wouldn't recommend it."

Jackie Raymond, RHIA, of Brigham and Women's Hospital, said, "We underestimated the time required to adequately clean the scanning machines, which impacted the daily workflow. We also underestimated the amount of time required to prep an admission for scanning. We discovered it is better to invest more time in the prepping process, as it leads to a smooth work flow for the remaining steps. We also conducted weekend training sessions and needed overtime to catch up and make a successful transition to scanning."

Greaves commented, "We would not have back-scanned records en masse as we did at our first hospital. The requirement to provide the paper record to supplement the imaged record quickly dissipates as the imaged data accumulates and the staff develops confidence in the record availability in the system. That period is painful, but short-lived."

Finally, Mizel offered, "I would have spent more time training on the prepping process. I would also have set up less document types by grouping the documents into major categories and not having a document type for each form title."

Note

1. Respondents to the survey worked at the following facilities: Owensboro Medical Health System, a 300-bed hospital in Owensboro, KY; Brigham and Women's Hospital in Boston, MA, a 747-bed hospital; Harris Methodist Fort Worth Hospital, 724-bed hospital in Fort Worth, TX; Christiana Care Health System, Wilmington, DE with two hospitals and 11 clinics; National Jewish Medical and Research Center, Denver, CO, with one hospital and six clinics; Montefiore Medical Center with three hospitals and 21 clinics in Bronx, NY; Hennepin Faculty Associates, with eight clinics in Minneapolis, MN; Presbyterian Health Plan, with 450,000 members in Albuquerque, NM.

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