Printing Electronic Records: Managing the Hassle and the Risk

by Gina Rollins

Paper copies of electronic records pose more than administrative hassles, they raise liability concerns as well.

As healthcare providers move closer to fully electronic health records, paper remains, frustratingly, part of the equation.

Some elements, like authorization and consent forms, may never start out in digital format, and there will continue to be a need to print official records for legal or patient care purposes. However, there are other instances when elements of the chart created electronically manage to find life in paper.

Printing portions of the EHR can, at a minimum, pose headaches for HIM staff charged with maintaining complete and accurate records. Absent sound, well-implemented policies and procedures, the practice can also pose concerns about the integrity of records. "It's a nightmare because you don't know whether someone printed out [a piece of the record] and wrote on it, and if they did, where it is," explains Margret Amatayakul, RHIA, CHPS, CPHIT, CPEHR, FHIMSS, president of Margret\A Consulting in Schaumburg, IL.

Why Is Paperless So Hard?

Digitized portions of the medical record may be printed in many settings under a variety of circumstances, but most printing involves resistance to change. In general people prefer familiar and comfortable routines over new workflows and technologies. This is human nature, and it applies equally throughout a healthcare facility. However, physicians typically are more empowered to stick with the tried and true, compelling organizations, at least for a period of time, to allow printouts of certain EHR components.

As Rady Children's Hospital and Health Center in San Diego began implementing an electronic history and physical (H&P) feature, some surgeons believed it would be easier for them to update them from hard copies. "As a baby step we allowed the H&Ps to be printed," reports Cassi Birnbaum, RHIA, CPHQ, director of health information and privacy officer. "Some physicians started signing [the printed copies], but then they found out they'd have to sign the H&Ps electronically anyway, so they stopped doing it."

Brigham and Women's Hospital in Boston faced a similar circumstance when it first implemented electronic discharge summaries. "Some physicians wanted to print out the discharge summaries, edit, and sign them, and we let them for a while," reports Jackie Raymond, RHIA, director of health information services and privacy officer. The practice stopped after doctors had more training, became more comfortable with the system, started using other EHR functions, and saw their colleagues using the EHR discharge summary module.

Resistance to change drives most duplicative printing, but organizations sometimes make a calculated decision to do so because of resource and access issues. At Hall-Brooke Behavioral Health Services in Westport, CT, laboratory test findings have been electronic for three years, but the system automatically prints new lab results every night at midnight.

"There are not enough laptops or screens, and the nurses must see [the results]," explains Elisa Gorton, RHIA, MA, HSM, manager of health information services and privacy officer. A nurse reviewing the labs might circle high or low values on the printed lab result, document that he or she has discussed it with the physician, and note when the test should be retaken. These written-on test results are then routed to the HIM department, where they become part of the patient's medical record, which is hybrid, an electronic and paper mix.

Hall-Brooke has adapted this special arrangement until it can make more computers available on each unit in a way that maintains patient privacy and both patient and staff safety. Other than this special circumstance, "HIM staff are the only people authorized to print [from the EHR]," says Gorton. "There's no printing of documents elsewhere. If we allowed it, there would be questions about how many copies were out there and which was the true original."

Christiana Care in Wilmington, DE, is facing a similar dilemma as it implements electronic medication records and electronic signature functions. Early in the planning process, it surveyed physicians for feedback on digitizing these features and disabling print capabilities.

"The responses were about 50-50. Half said it's fine to stop printing and move ahead to all EHR. The other half said it's important to continue to have print capabilities. The passion around that came through," says Kathy Westhafer, RHIA, CHPS, program manager for clinical information access. As a result, Christiana Care will allow printing from the EHR until it works through some hardware issues, getting enough of the right devices in the right places.

Worries about EHR reliability can also lead to duplicative printing. Amatayakul is aware of organizations that continue paper medication administration records after implementing barcode or other electronic medication administration modules. "It's because they're so nervous" that there will be a problem with the EHR, she explains.

In theory the paper and electronic records will be reconciled, but medications may not be documented on both systems. "You can compare the hard copy against the computer, but which is right?" she asks. "It's a huge patient safety issue. It's worse than not having computerized records."

Chasing Stray Copies

Organizations with hybrid records probably face more issues around printing than those further along in EHR implementation. In hybrid situations there may be several acceptable means of documenting treatment and fewer ways to identify missing documentation.

In a hybrid environment, for example, physicians may be able to dictate progress notes, enter them directly into the EHR, or write on forms that are scanned later by HIM staff. As EHR implementation progresses, the option of completing forms by hand may be discontinued, and audit functions will identify any records accessed or modified as well as visits or procedures completed for which documentation is pending.

Hybrid records can pose particular challenges when records are amended. "We've seen an increase in patients asking to amend their records, and it gets more difficult if there is a hybrid record. You wonder if there are copies out there and, if there are different versions, which is current," explains Raymond.

Paper copies also cause confusion when the format of printouts changes. EHR copies printed at different times with different versions of the software may contain the same information but appear different, according to Reed Gelzer, MD, MPH, CHCC, chief operating officer of Advocates for Documentation Integrity and Compliance in Wallingford, CT.

In at least one malpractice case, "copies [of the EHR] were printed for both the plaintiff and defendant, but there were multiple ways to accomplish it. In the end there were three copies of the medical record. The information was identical, but it appeared differently, and the court spent several weeks proving that it was the same information," Gelzer says.

Some organizations now make PDF versions of EHRs released for legal purposes. "That way they can reproduce exactly what they released. You may still be creating a record of July 25, 2004, but the way the system printed it on September 5, 2005, and September 5, 2006, may be different," Gelzer says.

Steering Clear of Work-Arounds

While looking forward to the time when health records are virtually paperless, HIM professionals can take steps now to minimize problems associated with printing. One of the most important is taking an active role in EHR implementation and in guiding institutions to consider the ramifications of printing portions of the EHR.

"HIM [professionals] are attuned to the systems, and they can get the hospital to slow down and do it right. If [organizations] do it too fast and don't fix problems, that's when people develop these work-arounds," contends Amatayakul. She supports transition strategies like those employed by Rady Children's and Brigham and Women's Hospitals-to a point. "I realize people can only implement so much, but I'm not an advocate of operating in between [paper and electronic formats] for a long period, because it doesn't help the cause." It's better to set a firm date and cut over from paper to all electronic, she says.

The process of leaving paper behind goes smoother when mechanisms are in place to boost confidence in the EHR. For instance, a clinician thinks she's entered progress notes for a patient but can't locate them online. Were the notes actually saved in the system, and do they map to the appropriate modules?

"There's literally billions of pieces of information in an EHR," says Gelzer. "How do you certify that it accurately reflects what's in the record? There will be a period of time where that level of due diligence is required. Twenty years from now it will all be pro forma." Short of verifying EHR accuracy, an index or table of contents can help clarify which parts of the record are electronic and where they can be found, suggests Amatayakul.

HIM staff have an important role in developing and periodically reviewing documentation and printing policies. "You need to evaluate them on a continuing basis to ensure that they're flexible enough. Then as you move forward you can reassess and readjust," says Amatayakul.

Documentation policies that specify document formats and the time frames required for completing records should bring clarity to a relatively common situation, that of a physician performing rounds in a hospital who prints face sheets for patients he expects to see. He then jots down a few memory-jogging notes for later dictation or EHR entry. At what point do these notes need to be part of the official record, even though they're outside the approved method of documentation?

"With notebook computers and the ability to handwrite on computer screens, there's technically no reason to document anything in paper. But if people are going to do so, it needs to be in the context of established policies and procedures," contends Gelzer. "Anything that's transcribed in the system needs to be within four to six hours after the visit so it meets the timeliness standard. If someone takes crib notes and three weeks later is sitting down to dictate, those crib notes really are the record."

Any handwritten notes not intended for the official record should be disposed of properly-and consistently. "Don't keep some and throw others away. That type of inconsistency can be a problem in legal settings," advises Amatayakul.

Finding Local Solutions

Organizations have employed various strategies to rein in inappropriate documentation practices. Mayo Clinic Hospital in Phoenix has used an EHR system since opening in 1998. However, Mayo Clinic Arizona outpatient services, in operation before the hospital, used a much-revered paper chart system that dated back to Mayo Clinic's earliest days in Minnesota. One of the strategies used to help physicians transition from handwritten documentation was to designate a physician liaison.

"It means one thing if I say you can't document on printed copies of the EHR, but it carries more weight if a colleague says it," explains Debbi Jaskowski, RHIT, CHP, operations administrator. "We had a physician who would go to colleagues and tell them, 'This is not how we're working anymore. You have to dictate a note for it to go into the medical record.'"

Mayo Clinic Arizona also surveyed each department. "That was very helpful. We sat down and asked, what's in the old paper record that you can't live without? What's most important to you," recalls Jaskowski.

Most of the suggestions were generic enough to be used across all specialties, but certain adaptations were made. For instance, cardiologists and ophthalmologists wanted to review new and previous tests concurrently. In some instances, side-by-side terminals were installed; in others, HIM staff scanned pertinent portions of old records. "That was a way to keep the old charts from them. We had a concern that they might scribble something that needed to be in the new record," Jaskowski says.

Other institutions have disabled certain print functions, removed printers from certain areas, or used colored paper or paper with watermarks to indicate that anything printed from the EHR is not intended to be part of the official record. At Christiana Care any pages printed from the EHR include a notice: "Do not sign or edit this copy." The note also indicates that the original

record is the electronic one. “It’s a macro in the transcription system, which is stripped out if you’re just viewing the EHR. You only see it if you print out,” explains Westhafer.

Plans for transitioning from paper to EHR should be well-thought out, with input from those most affected-physicians, nurses, and other clinicians. However, once the plan is implemented, “you have to stick to it and not give exceptions. They’ll come in with good reasons as to why they need paper,” advises Jaskowski.

Industry certification criteria and definitive guidelines on printing are likely a while in the offing. In the meantime, organizations will find the best course of action based on individual circumstances, says Westhafer. “There’s not necessarily a right decision across the board. It’s up to your own processes and what your applications can and can’t do while you’re working towards an EHR.”

Gina Rollins (rollinswrites@verizon.net) is a freelance writer specializing in healthcare.

Article citation:
Rollins, Gina. "Printing Electronic Records: Managing the Hassle and the Risk" *Journal of AHIMA* 78, no.5 (May 2007): 36-40.