EHR: Improving Care or Complicating Litigation?

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Electronic Health Records (EHR) were generally promised to decrease costs and improve health-care outcomes. Setting aside whether those promises were well founded, EHR have posed new challenges for litigators. What makes sense in a clinical setting may not in a courtroom. What may be critically important in a medical malpractice action might be of no consequence or importance in a patient's treatment. According to Paul R. Lindeman, M.D., chief medical information officer for veEDIS Clinical Systems, an emergency department and advanced decision support software vendor, "There are all kinds of competing pressures for EHR vendors where legality and audit trail meet ease of use. Even very fundamental questions can pose serious design concerns." Among the areas of conflict identified by Lindeman are (1) how and to what degree should one health-care provider be able to add information to notes of a physical examination performed earlier by another provider; (2) whether and how to identify the deletion of inaccurate information; and (3) whether to provide an internal messaging system and, if so, whether to incorporate it into the legal chart. If incorporated into a legal chart, what is the chart — and can it be printed easily and in a format recognizable to those who saw it only on a computer screen while they were caring for the patient?

As EHR systems evolve, more and more conflicts likely will arise between what is good for the doctor and his patient and what is good for the attorney and her client. The following are just a few more detailed examples.

Prepopulated Fields: Does "Yes" mean "Yes"?
A "prepopulated field" refers to electronic information within a record template that is completed in advance. For instance, within a template for a physical examination, the prepopulated field for various systems (e.g., neurological) might be "WNL," for "within normal limits." Unless the provider opens that field and selects a different response, it will appear to a subsequent reader that the patient's neurological system was normal. But was it really? Perhaps the patient's neurological status was not pertinent to the examination at that time, and the physician never assessed it or made any effort to change the prepopulated information. An audit trail (essentially a log that records who did what at what time within an electronic record) may indicate whether the field in question was prepopulated, accessed, or changed but audit trails can only tell you so much.

Contrast this with a paper treatment template. Such a template might have the paper equivalent of prepopulated fields. It may allow a nurse to circle or write "WNL." In this case, at least a subsequent reader, whether another health-care provider or an attorney, can be reasonably sure that the nurse intended to record that the examination was normal rather than that she either did not make any assessment or acciden-

tally clicked the wrong item from a drop down menu within an EHR template.

Electronically Populated Fields: Is it man or machine?

An "electronically populated field" refers to data that is automatically recorded within EHR without direct input by a person. For example, a patient may be connected to a monitor that periodically records pulse, blood pressure, and oxygen saturation. That monitor may interface with the hospital's EHR system and electronically populate fields for vital signs that can then be electronically accessed by various health-care providers. Upon receiving a printed health record in discovery, do you know whether the vital signs recorded were electronically populated or manually entered by a nurse? Does a recorded vital sign mean that the nurse saw the patient and assessed him at that time, or does it merely mean that a monitor automatically obtained and recorded the vital sign without any input from a human?

Audit Trails: Is timing everything?

Generally, an "audit trail" is a log or record of changes made to a database or file. An audit trail may indicate when and by whom a particular laboratory or radiology study was accessed by a patient's doctor. Let's say that Dr. Jones is waiting for a troponin result (a cardiac enzyme associated with damage to heart muscle) for a patient he suspects may be having a heart attack. An audit trail indicates that Dr. Jones — or at least someone using his user ID — accessed the patient's lab studies at 8:32 a.m., by which time the hospital laboratory had obtained an elevated troponin result, but Dr. Jones now has no recollection of having received the troponin result before he handed over care of the patient to another physician. Can we eliminate the possibility that someone else accessed the information using Dr. Jones' user ID (because he had failed to sign off or the system had not yet logged him off)? How was the time recorded in the audit trail generated? Does the EHR system automatically correct the time (e.g., to reflect Daylight Savings Time) or must someone manually set the time? Is the time within the EHR module accessed by Dr. Jones synchronized with the time recorded within the laboratory module — is 8:32 a.m. the same time within both modules? Is the audit trail able to tell us that Dr. Jones actually accessed the troponin study, or does it only tell us that he more generally accessed recent lab studies? Is it able to tell us that the troponin result actually was available at 8:32 a.m. within the EHR module accessed by Dr. Jones? In short, the audit trail may not be telling us what we think it is.

Printouts: Are we seeing the same thing?

If you have ever received a printout of a patient's medical "chart" from an extended hospital visit or admission and begun to wade through page after page of seemingly identical or duplicative information in a format that appears to make little sense, then you have been faced with a large part of the problem with EHR in a litigation setting. As Lindeman notes, and as medical malpractice attorneys undoubtedly have heard from their health-care clients, the printed "chart" rarely looks the same as what they would have seen on a computer screen at the time they were caring for their patient. This potential discrepancy may give the health-care provider — and subsequently the medical malpractice attorney — difficulty in deciphering the options that were even available for the health-care provider to select while caring for a patient. For example, the printed "chart" may not contain all of the information available within the EHR as the health-care providers viewed it on their computer screens, which may call into question the specific actions taken by the health-care provider while caring for a patient. Further, the discrepancy begs the questions referenced above — are internal messages part of the legal chart? Are e-mails or text messages between doctors?

Conclusion:

On the one hand, EHR have given health-care providers, and those who sue them and those of us who defend them, access to more information than was available with the traditional paper record. But on the other hand, EHR have raised a host of new questions and challenges, and as the systems evolve they promise to highlight more conflicts between good clinical care and effective legal representation.

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