Electronic Health Record Risks

A survey of 50,000 members of The Doctors Company in the third quarter of 2011 (with 5,100 responses) revealed that 30 percent of responding members have an electronic health record (EHR) in their practice that fulfills Meaningful Use criteria.

Another 14 percent of responders plan to have an office EHR within the next three years. Only 17 percent have no plans to use a practice EHR (56 percent of members in this group are likely to retire within five years).

In the fall of 2011, the Institute of Medicine issued a report titled Health IT and Patient Safety: Building Better Systems for Better Care. It concluded that the information needed for analysis and assessment of the safety of health IT (HIT) and its use isn’t available, adding that our understanding of EHR benefits and risks is largely anecdotal. The report recommends creating a federal agency for systematic and uniform data collection to investigate harm and safety events related to HIT. Currently, PDR Network’s EHRevent is the only national reporting system for EHR users to document adverse events. This Web-based, confidential EHR Safety Event Reporting System is available at www.EHRevent.org. Report confidentiality is protected through its designation as a certified Patient Safety Organization.

The discussion of EHR benefits and risks that follows is based on articles and reports appearing in peer-reviewed and non–peer-reviewed medical literature and in the EHRevent Newsletter, a publication that features an “Event of the Month” reported to EHRevent.org.

EHR Benefits and Associated Risks

1. Improved Medical Record Documentation and Legibility. Computer physician order entry (CPOE) reduces errors by eliminating illegible orders and transcription errors.

2. Enhanced Medication Management. EHRs generate alerts for improper drug dosages, adverse drug-drug interactions, and drug allergies.
   - However, drug-drug interaction lists may generate frequent, annoying, or disruptive alerts. Doctors may develop “alert fatigue” and override or disable them. If the alert would have prevented an adverse drug event, the physician may be liable. Optimized or expert consensus lists focused on fewer clinically meaningful interactions may be a solution.

3. Facilitates Medication Reconciliation. EHRs ensure that the active medication list corresponds to what the patient is actually taking.

4. Better Presentation of Data for Clinical Decision-Making. Examples include procedure findings, consultations, and lab and imaging results—and abnormal results can be flagged. However, be aware of the following:
   - Doctors may copy information from prior notes (theirs or others) and paste it into a new note—then make edits as appropriate. This may cause irrelevant over-documentation, often aggravated by the use of templates, that results in the loss of narrative documentation.
   - EHRs may autopopulate fields in the history and physical (H&P) (from data fields in a prior H&P) and in procedure notes (from personalized or packaged templates). Entering erroneous or outdated information may increase liability. Example: An internist’s EHR was the medical record. Some of the autopopulated fields contained obviously wrong information. At deposition the plaintiff’s attorney asked these questions:
     a. “So is the information in this record accurate or not?”
     b. “Do you bother looking at your records?”
     c. “If these ‘autopopulated’ fields are incorrect, can we trust anything in this record?”
     d. “Do you deliver the same level of patient care as the care you take in record keeping?”
   - Templates with drop-down menus facilitate data entry but are often integrated with other automated features. If you select an item above or below the one desired, amoxapine becomes amoxicillin or “qd” becomes “qid.” Entry errors may be perpetuated elsewhere in the EHR—and be overlooked. Erroneous information is easily disseminated.
   - Meaningful Use requires online patient connectivity through patient portals. Some EHRs have questionnaires...
using algorithms to interview the patient. These may address issues physicians are not prepared to pursue (depression, substance abuse, STDs, etc.). Failure to follow up can create liability.

5. **Clinical Decision Support (CDS) Systems.** As required by Meaningful Use, CDS systems provide algorithm-based alerts, warnings, and reminders for medication management, chronic disease management, and preventive care. It’s important to know the source of this information because it may conflict with your specialty’s clinical standards of care or practice guidelines—and with the information in FDA-approved drug labels and alerts.

- EHRs provide extensive documentation of clinical decision-making and activity, including departures from CDS guidelines, that physicians may have to justify. Will CDS systems establish new standards of care?

6. **Facilitates E-Prescribing.** It is estimated that 35 percent of office practices use e-prescribing. SureScripts has medication data on 66 percent of patients and transmits to all chain pharmacies, 60 percent of independent pharmacies, and most insurance formularies. E-prescribing reduces costs by flagging generic and “on-formulary” drugs and encourages patients to fill prescriptions (25 percent do not). The software checks for drug-drug interactions, dosage errors, medication allergies, and patient-specific medication factors (renal failure, liver failure, etc.). However, be aware that EHR e-prescribing creates exposure to community medication histories (drugs prescribed by others). Drug-drug interactions can be time-consuming to trace, as in the following example:

a. Dr. A renews a medication. His e-prescribing program sends an alert advising him that it could interact with another drug the patient is taking. He did not prescribe that drug, so his office will have to contact the patient to identify who did.

b. Dr. A will then have to contact Dr. X to discuss which drug will be discontinued or changed. If failure to do so results in patient injury from a drug interaction, Dr. A may be liable.

### EHR Risks

1. Doctors are responsible for e-health information they can access from outside the practice, from their practice EHR or Web site, or through a health information exchange (hospital charts, consultant reports, lab and imaging reports, etc.). It will be a challenge to examine the patient and his or her electronic dossier in a 15-minute visit.

2. The computer may become a barrier between doctor and patient. Filling in a computer template may divert attention from the patient, limiting interactive conversation and restricting creative thinking—further weakening the doctor-patient relationship.

3. Vendor contracts may attempt to shift liability resulting from faulty software design or clinical decision support onto the user. Malpractice policies may exclude coverage for product liability and for indemnification of third parties. Read all EHR contracts carefully.

4. As part of the discovery process, lawyers may request not only printed copies of the EHR but also the raw e-data for metadata analysis. This includes logon and logoff times, what was reviewed and for how long, what changes or additions were made, and when the changes were made. Smartphone and e-mail records are also discoverable. Remember: all physician interactions with the EHR are time-tracked and discoverable.

5. Computer-assisted documentation, including point-and-click lists, drop-down menus, autofill, templates, and canned text, bypasses natural language and produces structured progress notes. These often contain redundant, formulaic information. It is easy to overlook significant clinical information lost in a sea of normal or irrelevant findings (primarily documented for coding and billing purposes). As a result, communication with on-call and consulting physicians (and with patients) may be compromised.

6. In a misguided attempt to protect records from alteration, some EHRs won’t allow editing or correction of entry errors made in progress notes. You can make another note calling attention to the error, but the error may persist elsewhere in the EHR.

7. The transition from paper to EHRs can be risky. When scanning or entering paper records into an EHR, you must comply with federal and state record retention laws.
before destroying old records. Failure to do so can result in an allegation of spoliation of evidence.

The Medical eRisk Considerations for Online Communication were originally created by the eRisk Working Group; development has been transferred to the iHealth Alliance. The eRisk Considerations are available in the EHR and Telemedicine Resource Center at www.thedoctors.com/erisk. These are a few highlights:

1. Clinician-patient relationships should be preexisting and not be initiated online.
2. Online diagnosis and treatment of new conditions may increase liability; consultation should be limited to known preexisting conditions.
3. Licensing jurisdiction: Online interactions are subject to state licensure requirements. Physicians should be licensed in the state in which the patient resides.
4. Avoid emergency subject matter. Send patients to the ER for chest pain, shortness of breath, high fever, trauma, bleeding in pregnancy, etc.
5. Web site advertising and promotional material may raise patient expectations, imply a warranty or an implicit guarantee, or violate consumer protection laws (and damage caps don’t apply). Cosmetic medicine and surgery, off-label drug use, and non–FDA-approved drugs and medical devices are at high risk.
6. Avoid discussing sensitive subject matter, including substance abuse, mental health, HIV status, and sexually transmitted diseases.
7. Tips to reduce social media risks:
   - Social networking is too informal for physician-patient communication.
   - Don’t discuss individual patients or give medical advice.
   - Social media sites are not HIPAA-compliant, secure networks.
   - Assume that anything you say or post is in the public domain.
   - Don’t text message hospital orders (Joint Commission requirement).

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The guidelines suggested here are not rules, do not constitute legal advice, and do not ensure a successful outcome. The ultimate decision regarding the appropriateness of any treatment must be made by each health care provider in light of all circumstances prevailing in the individual situation and in accordance with the laws of the jurisdiction in which the care is rendered.