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EHR RISKS:
HOW TO PROTECT
YOUR PRACTICE

THE**DOCTORS**COMPANY
medical ~~mal~~practice insurance

YOUR PRACTICE IS AT RISK

There are often unanticipated consequences when new technologies are adopted—and the electronic health record (EHR) is no exception. Real and potential malpractice risks have become increasingly apparent, and it is important for doctors and practice managers to become familiar with them.

To help healthcare providers contend with the challenges of working in an EHR environment, this report presents the most critical EHR risks for your practice. It then reveals the findings of The Doctors Company's comprehensive analysis of EHR-related claims, and provides practical tips you can implement to help mitigate EHR risks.

14 CRITICAL EHR RISKS

The integration of the EHR into medical practices has great potential to advance both the practice of good medicine and patient safety. However, EHRs also introduce new liability risks. Below are some of the most common pitfalls every physician should know.

1. Increased Data Access

Doctors are responsible for information to which they have reasonable access—and they have increased access to external e-health data from hospital EHRs, consultants' reports, laboratory and radiology reports, community medication histories, and Health Information Exchanges. When accessed from the office EHR, the metadata will document what was reviewed and when. If patient injury results from a failure to access or make use of available patient information, the physician may be held liable.

2. E-Prescribing

EHRs facilitate e-prescribing—which also creates exposure to community medication histories where drug-drug interactions are time-consuming to trace. For example, 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; therefore, his office will have to contact the patient to identify the prescribing physician (Dr. X). 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.

3. Alert Fatigue

EHRs facilitate medication reconciliation and management, and they include alerts for improper drug dosages and drug allergies. However, frequent drug-drug interaction alerts lead to "alert fatigue," often causing physicians to override or disable them. If it can be shown that following an alert would have prevented an adverse patient event (this will be documented in the metadata), the physician may be found liable for failing to follow it.

4. Copy and Paste

Copying and pasting data allows doctors to replicate information from a prior note or the history and physical (H&P) and paste it into a new note or H&P, editing where appropriate. This is particularly risky for the physical examination, which may have changed since the prior patient encounter. Copying and pasting may result in irrelevant over-documentation, perpetuate outdated or incorrect information, and produce voluminous progress notes that obscure important new information. The narrative documentation of daily events and the patient's progress may be lost, thereby compromising the record of the patient's course.

5. Erosion of the Doctor-Patient Relationship

The computer may become a barrier between the doctor and the patient. When the doctor fills in a computer template, it may divert attention from the patient, limit interactive conversation, and restrict creative thinking. This may depersonalize and weaken the doctor-patient relationship. The computer's location in the office is an important ergonomic consideration; i.e., the location of electrical outlets shouldn't force the doctor to sit with his or her back to the patient.

6. Autopopulation

EHRs may autopopulate fields in the H&P (from data fields in a prior H&P) and in procedure notes (from personalized or packaged templates). This may result in erroneous or outdated information and compromise the integrity of the patient's medical record.

7. Responsibility for Content

EHRs are certified for compliance with Meaningful Use requirements, e.g., computerized provider order entry (CPOE), e-prescribing, Clinical Decision Support (CDS), and patient connectivity through patient portals. Patients must be provided with clinically relevant, disease-specific educational and drug safety materials through patient portals. Providers are responsible for the content, creating an area of potential risk. Additionally, some EHRs have patient questionnaires that use an algorithm to interview the patient through these portals. The questionnaires may address and record issues that physicians are not prepared to pursue (depression, substance abuse, sexually transmitted disease, etc.). Lack of or incomplete follow-up can lead to unforeseen liability exposure—and provide a clear record for the plaintiff's attorney to follow.

8. Vendor Contracts

Vendor contracts may attempt to shift liability resulting from faulty software design or CDS data onto the physician. Malpractice policies may exclude coverage for product liability and indemnification of third parties. Physicians should read all contracts carefully.

9. Electronic Discovery

All physician interactions with the EHR are time-tracked and discoverable. During discovery, lawyers may request printed copies of the EHR and also copies in native format, which shows how the data was used. For example, were CDS alerts and prompts followed or overridden? They will also request the metadata, which 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.

10. Drop-Down Menus

Templates with drop-down menus facilitate data entry but are often integrated with automated features elsewhere in the EHR, where errors can be easily overlooked and disseminated. If an item is selected above or below the one desired, for example, "qd" can become "qid." Erroneous information, once entered into the EHR, is easily perpetuated and disseminated.

11. Departures from CDS Guidelines

EHRs provide e-prescribing drug information and CDS databases, as required by Meaningful Use. Clinicians should know the source of the medication and CDS information in their EHRs, because it may be in conflict with the clinical standards of care or practice guidelines for their specialty and with the information in U.S. Food and Drug Administration (FDA)–approved drug labels or drug alerts. EHRs document clinical decision making, including all departures from CDS guidelines. A physician should always document why a CDS prompt was overridden.

12. Redundant, Formulaic Information

EHRs improve medical record documentation and legibility. However, point-and-click lists, drop-down menus, templates, canned text, and autopopulation of data fields from personalized or packaged templates (for both procedure notes and the H&P) produce redundant, formulaic information that makes it easy to overlook significant clinical information. Key data can be lost in a sea of normal or irrelevant findings, primarily documented for coding and billing purposes. As a result, communication between on-call and consulting physicians and with patients may be compromised.

13. Errors in Progress Notes

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

14. Record Retention

Transitioning from paper to EHRs can be risky. When scanning or entering paper records into an EHR, physicians 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.

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ANALYSIS OF EHR-RELATED CLAIMS

Between January 2007 and June 2014, The Doctors Company closed 97 claims in which EHRs were a contributing factor. An analysis of these claims revealed the top patient allegations and the most common factors that lead to patient injury. Some claims contained more than one contributing factor.

This analysis also identified the most common EHR-related allegations, the locations where EHR claim events occurred, and the specialties that are most at risk for an EHR-related claim. The data is presented below, along with summaries of specific claims.

EHR USER FACTORS: PROBLEMS ASSOCIATED WITH HUMAN ERROR

The top user factors that contributed to EHR-related closed claims include:

16%   Incorrect information in the EHR from data entry errors

15%   Hybrid health records and EHR conversion from paper to digital files

13%   Prepopulating data, including copying and pasting data without modification

7%   EHR training and education

7%   EHR user errors other than data entry

3%   EHR alert issues and alert fatigue

1%   EHR and computer physician order entry workarounds

Claim: Copy and Paste

A toddler was taken to a country where tuberculosis was prevalent. After the trip, he presented with fever, rash, and fussiness. The physician considered insect bite or flu and treated the child with fluids, antibiotics, and flu medication. His office EHR note indicated there was "no tuberculosis exposure." The physician copied and pasted this information during subsequent office visits without revision to note travel to a country with endemic tuberculosis. Two months later, the child was diagnosed in the ER with tuberculous meningitis. He had permanent and severe cognitive defects.

EHR SYSTEM FACTORS: PROBLEMS OF TECHNOLOGY, DESIGN, AND SECURITY

The top system factors that contributed to EHR-related closed claims include:

10%	Failure of system designs, such as outdated templates
9%	Electronic systems and technology failure where systems were unable to communicate with each other
7%	Lack of EHR alert, alarm, and decision support
6%	System failure, including electronic data routing
4%	Insufficient scope or lack of area for documentation
3%	Fragmented EHR
0%	Lack of integration or incompatible systems
0%	Failure to ensure EHR security

Claim: Lack of EHR Drug Alert

A dialysis patient transferred to a skilled nursing facility. There was an active hospital e-transfer order for Lovenox (anticoagulant). A physician evaluated the patient on admission but made no comment about the Lovenox order. During the first dialysis treatment, there was active bleeding at the fistula site. Heparin had not been given. The nursing staff did not inform the physician of the bleeding. During the second dialysis treatment, there was uncontrolled bleeding from the fistula site. The patient exsanguinated and expired. Experts were critical that there was no EHR High-Risk Medication Alert.

Claim: Insufficient Area for Documentation; Drop-Down Menu

A female patient had a bladder sling inserted for urinary incontinence. Her surgeon was assisted by a proctor surgeon who was representing the product manufacturer and training the primary surgeon on the procedure. The patient was informed that another physician would be assisting. While the patient was in the recovery room, blood was found in the Foley catheter. She was returned to surgery, where it was discovered that the bladder had been punctured by the sling. The proctor surgeon had approved the sling's placement; however, the circulating nurse had not documented the proctor's presence in the OR, due to a lack of this option in the EHR drop-down menu. There was no space for a free-text narrative to document that the patient had been informed of the proctor's presence.

Ninety-four percent of healthcare organizations have had at least one data breach in the last two years. And the average cost of dealing with those breaches was $2.4 million.

THE MOST COMMON EHR-RELATED CLAIMS

The top two allegations in EHR claims were diagnosis-related errors at
27 percent of claims and medication-related errors at 19 percent of claims.

27%	Diagnosis related (failure, delay, wrong)
19%	Medication-related
7%	Ordering wrong medication
5%	Ordering wrong dose
7%	Improper medication management

Claim: Lack of EHR Drug Alert

An elderly female saw an otolaryngologist for ear/nose complaints. The physician intended to order Flonase nasal spray. The patient filled the prescription and took it as directed. Ten days later, she went to the ER for dizziness. Two weeks later, the pharmacy sent a refill to the physician at his request. It was for Flomax (for enlarged prostate)— which has a side effect of hypotension. When ordering, the physician typed "FLO" in the medication order screen. The EHR automatched Flomax and the physician selected it. Flomax is not FDA-approved for females. There was no EHR Drug Alert available for gender.

Claim: Drop-Down Menu

A patient was seen by her physician for pain management with trigger point injections of opioids. The physician ordered morphine sulfate (MS) 15 mg every eight hours. In the EHR, the drop-down menu offered MS 15 mg followed by MS 200 mg. The physician inadvertently selected MS 200 mg and did not recheck before completing the order. The patient filled the prescription, took one MS along with Xanax, and developed slurred speech—resulting in an ER visit with overnight observation.

LOCATIONS WHERE EHR CLAIM EVENTS OCCURRED

The locations where EHR claim events occurred included the following:

43%	Hospital clinic or doctor's office
12%	Ambulatory or day surgery center
10%	Patient's room
9%	Operating room
7%	Emergency room
5%	Labor and delivery
4%	Radiology and imaging
2%	Dentistry and oral surgery
1%	Pathology
1%	ICU
1%	Neonatal ICU
1%	Radiation therapy
1%	Special procedures

Claim: EHR Training

A pregnant, non-English-speaking female with gestational diabetes was referred for an ultrasound (US) to estimate fetal weight. Her physician had planned a C-section if the baby was >4500 grams. The US report was sent by the laboratory to the hospital's EHR. The next day, the patient went to the hospital in labor. Her physician reviewed his six-week-prior prenatal written record but was not trained on the hospital's EHR and had no password—so he did not see the US report. He performed a vaginal delivery, complicated by shoulder dystocia that resulted in brachial plexus injury. The baby's weight was 4640 grams.

Claim: EHR Conversion; Incorrect Information in EHR

A patient with Tourette's syndrome was treated with Haldol 0.5 mg documented in the written record. The patient called the office requesting a refill. The nurse entered "Haldol 5.0 mg" in the new EHR for an electronic script. This refill request showed up as a task for the physician to complete. The EHR was new, and it was the first script for this patient. The intended dose (0.5 mg) was therapeutic. The patient took the new dose (5.0 mg) for six months before the office staff discovered the error. The patient had side effects: cough, weight loss, and malaise.

WHICH SPECIALTIES ARE MOST AT RISK

The specialties that were most involved in EHR-related claims were the following:

20%   Internal medicine specialties—cardiology/hospitalist/oncology/GI

16%   Primary care, family practice, and internal medicine

15%   Obstetrics and gynecology

14%   Surgical specialties (other than cardiac surgery)

7%   Nursing

5%   Radiology

4%   Anesthesiology

4%   General surgery

2%   Pediatrics

2%   Emergency medicine

2%   Psychiatry

2%   Orthopedics

1%   Pathology

Claim: Incorrect Information in EHR

A patient was seen by her cardiologist for hypertension. In the written medical record, her blood pressure medication had been increased to 25 mg once a day. Office staff entered the order into the EHR as twice a day. The prescription was filled. The patient missed her follow-up appointment. Seven months later, she went to the ER with numbness and weakness. Her potassium level was low. The cardiologist corrected the prescription error and gave her potassium.

Claim: EHR Training

A female presented to the ER with complaints of abdominal pain, nausea, and vomiting. An ovarian cyst had been removed two years prior. The emergency physician ordered an abdominal CT scan and called a gynecologist to evaluate the patient. The gynecologist reviewed a CT scan in the EHR that was later found to be the old scan showing the ovarian cyst. The patient was taken to surgery. No cyst was found, and the patient developed a MRSA infection. The gynecologist had not been trained on the new system and had not found the new CT scan that was available.

When used effectively, EHRs can provide doctors with quick access to data and the ability to share information more efficiently with other clinicians. But as the analysis above demonstrates, EHRs have also introduced unanticipated liability exposure. Being more knowledgeable about the many types of EHR risks—whether user or system based—can help you reduce EHR-related claims and incidents and improve the quality of your patient-centered care.

RISK TIPS

Apply these tips to help mitigate EHR-related exposures in your practice:

▸ Review all available patient information. Doctors are responsible for the information they can reasonably access.

▸ If using e-prescribing, be aware of the patient's entire inpatient and outpatient medication history. Reconcile any drug interaction alerts you receive.

▸ Don't ignore, override, or disable alerts, warnings, reminders, and embedded practice guidelines.

▸ Think twice before copying and pasting information from prior progress notes. This often results in lengthy over-documentation that obscures important new information and propagates incorrect information—and compromises patient care.

▸ Be aware that the use of templates may compromise accurate documentation, so make sure your documentation accurately describes the patient's condition.

▸ Don't let the computer become a communication barrier between you and your patient.

▸ Read contracts carefully. Vendor contracts may attempt to shift medical liability risk from faulty software design onto the physician.

▸ Remember that all interactions with the EHR are time-tracked and discoverable.

▸ Know the source of the medication and clinical decision support information provided with your EHR.

▸ Follow HIPAA regulations related to protecting "individually identifiable health information."

▸ When scanning or entering paper records into an EHR, comply with federal and state record retention laws before destroying old records.

PROTECTING PRACTICES AGAINST EMERGING RISKS IS JUST ONE WAY WE'RE TAKING THE MAL OUT OF MALPRACTICE INSURANCE

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