Presentation Outline

• Electronic Medical Record versus Electronic Health Record are they interchangeable?
• Impetus and Evolution of the Electronic Health Record
• "Meaningful Use" and the EHR Incentive Program
• Benefits of the Electronic Health Record
• Litigation Risks Associated with the Use of EMRs and EHRs
  – Risks from Technological Failures
  – Risks from Privacy Breaches
  – Risks during Implementation
  – Risks from Cloning and other Misuses
• Does the EHR Create or Expand New Duties?
• Does the EHR Change the Standard of Care?
Everyone is here to save you, but unfortunately, you’re not in the computer.
Are the Electronic *Medical* Record (EMR) & Electronic *Health* Record (EHR) the same thing?  

**NO**

**ELECTRONIC MEDICAL RECORD**

1. Digital versions of paper charts
2. Patient health information generated by encounters at one provider’s office or at a hospital or other facility
3. Used for diagnosis and treatment
4. Allows providers to track data over time
5. Medical record software purchased by providers

**ELECTRONIC HEALTH RECORD**

1. More inclusive and broader than one provider’s set of records
2. Contains aggregate information from all clinicians involved in the patient’s care from all encounters in any care delivery system
3. Connects physicians and other caregivers as all authorized clinicians can access the information to provide better care
4. Follows the patient to specialists, hospitals, SNFs and across the country.
"All this talk about EMRs and EHRs is just a fad - like the Internet thing."
Impetus and Evolution of the Electronic Health Record

2004 – President George W. Bush called for an EHR by 2014 and established the Office of the National Coordinator for Health Information Technology (ONC) within the US DHHS to coordinate and promote health information technology.

2009 – The Health Information Technology for Economic and Clinical Health (HITECH) Act of 2009 created an incentive program, estimated at $14-27 billion, run by CMS to pay providers and hospitals for using EHRs when treating Medicare and Medicaid recipients.

• To qualify, participants must show “meaningful use” of the EHR by the provider through core objectives:
  1. Electronic prescribing
  2. Computerizing Order Entry and Patient Information
  3. Drug interaction checks, and
  4. Capability to exchange information with other providers.
CMS issues incentive payments to eligible professionals, hospitals and critical access hospitals as they adopt, implement, upgrade or demonstrate meaningful use of certified EHR technology.
Through the Medicare EHR Incentive Program, eligible professionals can receive up to $44,000 over five years if started participation in 2012, or through the Medicaid EHR Incentive Program, up to $63,750 over six years.

*Hospitals are eligible for both incentive programs*

Non-hospital providers must choose which incentive program to participate in.
Meaningful Use

• 3 Stages for Participation in Incentive Program
  
  1. Stage 1 of Meaningful Use
  - 18 of 23 meaningful use objectives must be met
    - **Examples:** CPOE for medication orders and enter patient demographics
    - Must demonstrate meaningful use for a 90 day EHR reporting period, then for a full year.
  2. Stage 2 of Meaningful Use
  - 19 core objectives must be met
    - **Examples:** CPOE for lab and radiology orders and provide patients ability to view, download and transmit their health information within 36 hours of discharge.
Meaningful Use

• 3 Stages for Participation in Incentive Program (Cont.)
  3. All providers must report on Clinical Quality Measures for 2014 and beyond – Hospitals must report on 16 out of 29 CQMs
    • Examples: ED Throughput – presentation to departure for admitted patients and ischemic stroke patients DC’d on anti-thrombotic therapy

For more information on Meaningful Use Requirements:
MEANINGFUL USE

Dr. Jones successfully updates his Facebook status on rounds
Where are we with Implementing EMRs and moving toward a Nationwide EHR?

• 2008
  – 11% of nonfederal US hospitals had implemented basic EHR systems and < 2% had comprehensive systems in at least one clinical unit
  – Key EHR Functionalities implemented or initiated:
    • 56% electronic entry for physician notes
    • 52% clinical-decision support systems involving practice guidelines
Where are we with Implementing EMRs and moving toward a Nationwide EHR?

• **2009**
  – Non-hospital based physician practices
    • 21% had a basic system and 6% had a comprehensive system

• **2011**
  – Per CDC:
    • Physicians adopting EMRs doubled from 17 to 34% from 2008-2011
    • PCPs using EMRs nearly doubled from 20 to 39% during same timeframe
"You can go home now. The virus was in the diagnostic computer."
Benefits of the Electronic Health Record

EHRs have the potential to prevent harmful medical errors and malpractice claims as they:

1. Promote complete documentation and timely access to patient information facilitating sound clinical decision making
2. May decrease transcription errors with improved legibility
3. Improve communication among providers and limit duplication of tests
4. Provide updated medical information across the country when a patient presents away from home or their regular provider
Benefits of the Electronic Health Record

EHRs have the potential to prevent harmful medical errors and malpractice claims (Cont.):

5. Reducing medical errors by improving the accuracy and clarity of medical records
6. Clinical-decision support programs may offer a safety net by offering clinical guidelines and catching errors before causing harm such as allergy or medication contraindications
7. Telemedicine and ability to review records and images offsite, including fetal monitoring strips
8. Secure messaging systems and electronic communications may improve patient-provider communication and timely reporting of test results
An Obvious Joke

EVOLUTION OF HANDWRITING

COLLEGE:
The quick brown fox jumps over the lazy dog.

MEDICAL SCHOOL:
The quick brown fox jumps over the lazy dog.

RESIDENCY:
The quick brown fox jumps over the lazy dog.

ATTENDING: see resident note.
An Unfortunate Reality

CC(s):  

HPI:  

[Handwritten text not legible]
Litigation Risks associated with the Use of EMRs and EHRs

Risks from Technological Failures

Medical errors or other adverse events as a result of system-wide EHR failures or “bugs” that create problems in delivery of care

- System crash preventing access to critical information
- Duplication of orders and/or inconsistent orders due to interruptions in physician-to-physician communication via access to progress notes and physician orders
- Medical errors from the absence of or over-reliance on previously available alerts

Delays in care from converting to paper system during downtime, e.g., inability to use CPOE
- Data loss or destruction
"It's the latest innovation in office safety. When your computer crashes, an air bag is activated so you won't bang your head in frustration."
Litigation Risks Associated with the Use of EMRs and EHRs

• Risks from Privacy Breaches

Do you know who is accessing your patients’ protected health information?

- In 2012 US Department of Health & Human Services reported:
  » 125 large privacy breaches affecting 2.2 million people
  » Most of the health data breaches resulted from stolen computers
  » The largest breach in 2012 was due to a hacker who stole 780,000 patients’ information

• Experts believe hacker-related breaches are underreported because it is often undetected
Litigation Risks Associated with the Use of EMRs and EHRs

• **Risks from Privacy Breaches**

  In **2011** – *Sutter Medical Foundation*

  – Physician Network security breach
    » Through a broken window and unencrypted laptop computer was stolen
    » Laptop contained personal identifying information, e.g., names, DOB, and addresses for **3.3 million patients**
    » Medical diagnoses and treatments were included in the stolen information for 1 million patients.
  
  HHS and Office for Civil Rights issued a *civil monetary penalty of $4.3 million* for the HIPAA violation

  In **2013** – HHS updated HIPAA to expand required security protections for providers contracting with business associates to handle medical information. Providers can be fined up to **$1.5 million** for business associates’ failure to comply.
“Somehow your medical records got faxed to a complete stranger. He has no idea what's wrong with you either.”
Litigation Risks Associated with the Use of EMRs and EHRs

• **Risks During Implementation**
  – Medical errors and other adverse events can result from mistakes in utilizing the EHR, e.g., incorrect entry of information
  – Documentation gaps when some documentation is via paper and other electronic
    • Requires effective training and an effective back up plan
    • *Smith v. United States*, 119 F. Supp. 2d 561 (D.S.C. 2000) – held that when converting from a paper to an electronic system for delivering test results, the Hospital had a duty to “implement a reasonable procedure during the transition phase” to ensure timely delivery of results to physicians – the Court held the hospital met this duty by establishing a protocol before all physicians received training on the new system where the radiologists would inform ordering physicians of abnormal results by telephone and the results printed automatically in two locations.
Litigation Risks Associated with the Use of EMRs and EHRs

• **Risks During Implementation**
  
  – One hospital and family’s experience:

  • Genesis Burkett was born 16 weeks prematurely at Advocate Lutheran General Hospital in Park Ridge, Ill. She was thriving and, when 40 days old, a pharmacy technician administered a routine IV bag of sodium chloride and calcium. When entering the prescription information into the electronic system that automated how much of each solution to include, he entered the wrong sodium dose resulting in a dose 60 times the intended dose. Within hours, Genesis had a heart attack and died.

This case reminds us that although electronic medical systems can potentially prevent medical errors and help keep patients safe, they also have new dangers and the human factor can never be forgotten.
Litigation Risks associated with the Use of EMRs and EHRs

Risks from Cloning & Other Misuses

Has Charting Gone to the Dogs?
Litigation Risks associated with the Use of EMRs and EHRs

Risks from Cloning & Other Misuses

Medical Documentation Cloning

Cloning or “clinical plagiarism” involves cutting and pasting, or carrying forward, previously documented information from a prior encounter into current documentation.

Without careful review — carrying forward prior documentation can lead to:

1. Inconsistent and incorrect information which can be detrimental to the patient;
2. Over-reimbursement subjecting the provider and/or institution to claims of billing fraud/ false claims as the documentation reflects that the provider did more then they actually did resulting in fraudulently “upcoded” billing;
3. Perpetuation and dissemination of erroneous information.
Litigation Risks associated with the Use of EMRs and EHRs

Risks from Cloning & Other Misuses

Copying and Pasting affects the Integrity of the Chart:
1. Inaccurate or outdated information may adversely impact patient care
2. Inability to identify authors to discuss their thought process
3. Inability to identify when the document was first created
4. Inability to support billing codes
5. Causes propagation of false or untimely information
6. Can cause internally inconsistent and confusing progress notes
7. Repetitive information causes unnecessarily lengthy progress notes and takes away one benefit of written charts – where only contemporaneous and relevant information is documented.

“Sloppy” & Paste
## Cloning Example

### Outpatient Visit Note, 10/16/01

**VITALS:** BP:136/73 HR:80 Wt:246.4 lb PN 2/10 rt heel S. 57 year old RTC to p/u new FFO. Pt complains of heel pain rt only subsiding slowly with new orthoses; PMH: PTSD, depressed, GERD 79 pack years, quit smoking three years ago. Currently sober & for THE PAST 3+ years O Vasc: DP/PTpalable b/l, TTT intact b/l Neuro: Semes weinsein 5.07/10g monofilament wire sensation intact b/l epicratic sensation intact b/l Derm: toenails 1-5 b ft thickened brittle incurvated painful with yellow subungual debris distal 1/3 only Musc: strenght intact, ROM intact FLEXible PES cavus B/L, Flexible hammertoes b/l Pinpoint pain with palpable medial heel r only A 1. Plantar fascitis r>l CHRONIC 2. B/l PES cavus 3. onychomycoisis 1-5 b ft P. continue FOOTMAXX FFO rtc May 02 renew naprosyn 2 tabs bid # 120

### Student Note, 5/30/02

**VITALS:** 05/30/2002 08:55 BP:127/63 HR:72 Wt:255 lb [115.9 kg] S. 57 year old RTC to p/u new FFO. Pt complains of heel pain rt only subsiding with new orthoses; Pt cont to take the naproxen for pain relief. Pt states clotrimazole soln is working well for toenail fungus. PMH: PTSD, depressed, GERD 79 pack years, quit smoking three years ago. Currently sober & for THE PAST 3+ years O Vasc: DP/PT palable b/l, TTT intact b/l Neuro: Semes weinsein 5.07/10g monofilament wire sensation intact b/l epicratic sensation intact b/l Derm: toenails 15 b ft thickened brittle incurvated painful with yellow subungual debris distal 1/3 only Musc: strenght intact, ROM intact FLEXible PES cavus B/L, Flexible hammertoes b/l Pinpoint pain with palpable medial heel r only A 1. Plantar fascitis r>l CHRONIC 2. B/l PES cavus 3. onychomycoisis1-5 b ft P. continue FOOTMAXX FFO cont naproxen, cont clotrimazol soln rtc Aug 02 to be rescanned for new footmax ffos Pt and tx d/w Dr. XXXX.

---

*Figure 1. Marked-up progress note showing copied text (and rated "Human, clinically misleading, major risk").*
Litigation Risks associated with the Use of EMRs and EHRs

Risks from Cloning & Other Misuses

One study published in February 2013 Critical Care Medicine:
- Reviewed more than 2000 progress notes for 135 patients created by 62 residents and 11 attending physicians in a Cleveland medical ICU
- Utilized a software program capable of detecting identical word sequences
- Found that 82% of residents and 74% of the attendings cut and pasted more than 20% of the information in patient charts

Another case study in a July/August 2007 AHRQ WebM&M:
- 77 year old woman admitted for diarrhea and dehydration after chemotherapy
- An intern noted she would receive heparin for DVT prophylaxis.
- That note was copied and pasted for four days and signed by a resident and an attending who apparently believed the heparin had been ordered and administered.
- The patient was discharged without ever receiving the heparin and was rehospitalized two days later with a pulmonary embolism

Yet another case from Yale-New Haven Hospital in Connecticut:
- Patient admitted with a large pressure ulcer with an abscess
- Surgical intern noted in the EMR “Patient needs drainage, may need OR.”
- That same note appeared for several consecutive days, even after the patient went to surgery and drained the abscess
- The note confused the consulting infectious disease team and almost led to an unnecessary change in the antibiotic regimen.

Litigation Risks associated with the Use of EMRs and EHRs

Risks from Cloning & Other Misuses

Templates are another sources of duplication affecting chart integrity:

- A clinician may check “normal” for the GI system – the EMR may automatically populate “abdomen soft” and “normal bowel sounds” which may be incomplete or inaccurate.
- Templates may also auto populate information from one section of the EMR to another, e.g., from flowchart to notes, often creating a nonsensical narrative which can be at best, less descriptive, at worst internally inconsistent with the remainder of the chart.
Litigation Risks associated with the Use of EMRs and EHRs

Risks from Cloning & Other Misuses

The narrative note read:

• “The patient is a 74-year-old female who presents with a complaint of fall, 74-year-old female presents with complaint of neck pain, headache. She states that she had mechanical fall at home where she tripped and fell downstairs, approximately 9 steps and landed on her back. She complained of shortness of breath right after the event. She noted that she had pain in her left ankle and left knee. She is not sure whether she had loss of consciousness and the patient further complains of the pain in the right wrist.”

The note from the template read:

• “The occurrence was one hour prior to arrival. The course of pain is constant. Location of pain: Head leg. Location of bleeding: None. Location of laceration: None. The degree of headache is mild. The other degree of pain is moderate. The degree of bleeding is negative. Mitigating factor is negative. Immobilization no backboard in place and no cervical collar in place. Fall description tripped. Intoxication: No alcohol intoxication. Location accident occurred was home.”

Litigation Risks associated with the Use of EMRs and EHRs

Risks from Cloning & Other Misuses

In an article entitled *Electronic Medical Record and Social Media Malpractice Risks*, published by The Doctors Company at [http://www.thedoctors.com/KnowledgeCenter/Publications/TheDoctorsAdvocate/ID_010837](http://www.thedoctors.com/KnowledgeCenter/Publications/TheDoctorsAdvocate/ID_010837), David B. Troxel, MD, when discussing autopopulated fields containing wrong information, he relayed that during deposition, the physician was asked the following questions by Plaintiff’s Counsel:

– “So is the information in this record accurate or not?”
– “Do you bother looking at your records?”
– “If these ‘autopopulated’ fields are incorrect, can we trust anything in this record?”
– “Do you deliver the same level of care as you do in record keeping?”
Litigation Risks associated with the Use of EMRs and EHRs

Risks from Cloning & Other Misuses

Cloning also occurs when the medical documentation is exactly the same from patient to patient

• Each patient chart reflects the same problem, symptoms and treatment plan
  – This defies logic;
  – Misrepresents the medical necessity requirement for reimbursement of services; and
  – May constitute fraud resulting in recoupment of overpayments and possible levying of fines (e.g., OIG could fine them $150,000 or more for noncompliant documentation shortcuts).

• Medical record documentation must be patient and encounter specific
Litigation Risks associated with the Use of EMRs and EHRs

Risks from Cloning & Other Misuses

How to avoid inappropriate cloning of medical documentation?

Remove cut and paste function?
  • Not practical – some use is appropriate and a time saver

Create clear policies, rules and instructions for appropriate use of copy and paste functionality

Provide thorough training and sanctions for noncompliance

Provide voice recognition software as an
Now I know why they call it ICU!
Does the EHR *Change* the Standard of Care by Creating *New* Duties or *Expanding* Existing Duties?

**Answer:** Maybe

- Doctors are responsible for information that is reasonably accessible, e.g., “old charts”
  - **EMR/EHR & HIEs provide significantly more available data**
    - Including metadata of system login, logoff and how long a document was reviewed
    - In one case, metadata established that an anesthesiologist entered his postoperative note shortly after the surgery began
    - Metadata can be a shield or a sword
  - **Failure to access and act upon information may create liability**
    - HIEs will allow continuity of care wherever the patient is
    - Access to information through HIEs increases available data
Does the EHR *Change* the Standard of Care by Creating *New* Duties or *Expanding* Existing Duties?

**Answer:** Maybe

- Email communications between provider and patient
  - Offering email advice multiplies the number of clinical encounters which could lead to claims if the advice is offered without a thorough investigation and patient examination
  - Failure to timely reply to patient emails could constitute negligence

- “Alert Fatigue”
  - Providers may ignore, override or disable alerts, warnings, reminders and embedded practice guidelines
  - If acting upon an alert, or following a practice guideline could have prevented patient harm, the provider may be liable for ignoring or overriding the alerts/guideline prompts.
Does the EHR Lead to New Parties and Claims?

Answer: Maybe

– Will software vendors/manufacturers become co-defendants or witnesses?
  • Many contracts provide disclaimers of liability arising from the use of the program

– Will electronically generated practice guidelines built into the system software carry greater weight in determining the standard of care?
  • More so if the guidelines were created by the health care institution rather than the software manufacturer?

– How will juries allocate comparative negligence amongst individual clinicians, EHR developers, and provider organizations that select and implement EHR systems?
  • Will juries hold responsible those in control of the system architecture of a poorly designed EHR system and for implementation, and not the end user clinicians?

– Will failure to adopt and use electronic technology constitute a deviation from the standard of care?
What are the affects of the EHR on Litigation?

More Costly Discovery

- Expert testimony in the fields of health informatics or health IT
- All relevant electronically stored information is discoverable

- Includes metadata which historically was not considered part of the patient’s chart
- Metadata includes who entered data, when, who accessed it and when which may be critical to when and what a defendant provider knew at any given time
- Problematic as EHR systems are updated over time, adding or removing features – it is nearly impossible to produce the exact screen prints the provider saw at the time of the incident – it may provide complete data, but not in the same form.
In Conclusion

• As one scholar stated:

  “... Regardless, it is likely that EHRs are here to stay. As the use of EHRs becomes commonplace, the legal standard of care will evolve, and latecomers to the EHR table may be called to account.”

Final Well-Deserved Humor Break

Medical Charts say the Darnedest Things

• “nonverbal, noncommunicative and offers no complaints”
• Nursing notes in the ICU – “MD @ bedside attempted to urinate”
• “I don’t want to be incubated again”
• “V/Q scan was positive for low probability”
• “pt was apprehended and guarded”
• “partial TAH”
• “pt expired and was dc’d home”
• “I follow him for his paranoia”

Drum Roll – My Favorite:
Reason for leaving AMA – “pt wants to live”

http://susiecookhc.wordpress.com/2011/04/18/actual-emr-documentation/
Now...Back to work
Managing the risks of known and unknown perils
Resources

- **What are the differences between electronic medical records, electronic health records, and personal health records?**

- **EMR or EHR? What’s the Difference?**

- **Electronic Health Records – Auditing Quality and Compliance**

- **Litigation in the Decade of Electronic Health Records**

- **Perspective: Electronic Health Records (EHRs): Can we trust them?**

- **EHRs Prove a Difficult Witness in Court**

- **Medical Negligence: Dangers of electronic medical systems**
Resources

• *Documentation Bad Habits – Shortcuts in Electronic Records Post Risk*

• *Use of cloning in electronic records*

• *Auditing Copy and Paste*

• *The Perils of Copy-Paste*

• *Medical Malpractice Liability in the Age of Electronic Health Records*

• *5 Legal Issues Surrounding Electronic Medical Records*