Background
Our goal is to help faculty and residents engage with learners in the Electronic Health Record (to be learner-centered) while teaching and providing patient-centered care

- Discuss documentation/compliance issues with EHRs
- Review skills intended to facilitate patient-centered EHR use
- Introduce and explore the concept of learner-centered EHR use

Compliance

KEEP CALM and FOLLOW THE RULES

(Rules are different at different institutions)
Medicare guidelines

Students may document in the EHR

Preceptor/resident documentation

**May use student’s:**
- Review of systems
- Past medical history
- Family history
- Social history

These may be performed without preceptor being present

**May not use student’s:**
- History of present illness
- Physical examination
- Medical decision making

*Preceptor must perform and document*
Pitfalls

- Sharing log in
- ‘Make me author’ button
- Cut and paste

Compliance Summary

- Students can document in the EHR
  - Know your institution’s rules
- Never share log-in
- Avoid: copy/paste, ‘make me author’
- Preceptors/residents may use student’s:
  - ROS, Past medical, family, social history
- Preceptors must perform and redocument
  - HPI, PE, MDM
Scribes

• Students as scribes??
  – physician utilizes the services of his or her staff to document work performed by that physician
  – scribe does not act independently, but simply documents the physician's activities during the visit
  – The physician who receives the payment for the services is expected to be the person delivering the services and creating the record, which is simply "scribed" by another person
• Scribe attestation
  – "The documentation recorded by the scribe, XXXX, accurately reflects the service I personally performed and the decisions made by me."
• “Make me author”

Documentation pitfalls

• Not letting students document

• Lack of feedback on notes

• Using templates
Feedback on notes

**Note in EHR**
- Route student the note with feedback

**Word document**
- Via email
  - No personal health information
- Print with written comments

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**Templates**
- Don’t promote critical thinking
- Do not allow student to tell ‘the story’
- Take focus away from patient

- Where is the clinical reasoning?
Clinical documentation was developed to track a patient's condition and communicate the author's actions and thoughts to other members of the care team. Over time, other stakeholders have placed additional requirements on the clinical documentation process for purposes other than direct care of the patient. More recently, new information technologies, such as electronic health record (EHR) systems, have led to further changes in the clinical documentation process. Although computers and EHRs can facilitate and even improve clinical documentation, their use can also add complexities; new challenges; and, in the eyes of some, an increase in inappropriate or even fraudulent documentation. At the same time, many physicians and other health care professionals have argued that the quality of the systems being used for clinical documentation is inadequate. The Committee of the American College of Physicians has taken a leadership role in the discussion surrounding clinical documentation and to suggest a pathward such that care and clinical documentation in the future best serve the needs of patients and families.

In the past decade, medical records have become increasingly synonymous with electronic health records. The primary goal of EHR-generated documentation is to be concise, history-rich, notes that are used in the clinic setting. The ABDOMINAL PAIN template is provided for guidance.

**ABDOMINAL PAIN**

**CHIEF COMPLAINT:** @CHIEFCOMPLAINT@
This is a @AGE@ @SEX@ [***]
Historian: Patient
Time course: [Gradual]
Onset was [***] prior to arrival, Episodes [***]
Currently Symptomatic: [Worse]
Complicating Factors: Quality [Aching, Dull]
Severity: Maximum [Severe]; Current severity [Moderate].
Associated with: [No Flank pain, Groin pain, No Trauma, No Recent travel, No UTI]
[Abdominal distention, Vomiting, Diarrhea, Fever]
[Pregnancy risks: S/p hysterectomy, LMP, Prior ectopics, History of PID, IUD]
Exacerbated by: Movement
Relieved by: Nothing
@ALLERGY@
@PMH@
@SURGICALHX@
@SOC@
Templates

PHYSICAL EXAM:
@VS@
GENERAL: Patient is afebrile, Vital signs reviewed, Well appearing, Alert and lucid.
EYES: Normal inspection.
HEENT: normocephalic, atraumatic , normal ENT inspection.
CARD: regular rate and rhythm, heart sounds normal.
RESP: no respiratory distress, breath sounds normal.
ABD: soft, tender to palpation [***], BS [present], soft, no organomegaly or masses.
BACK: non-tender. No CVA tenderness.
MUSC: normal ROM, non-tender , no pedal edema.
SKIN: color normal, no rash, warm, dry.
NEURO: awake & alert, no motor/sensory deficit, gait stable.
PSYCH: mood/affect normal.

ASSESSMENT:
GI upset. No gross pain to suggest an acute abdomen, but will discuss signs and symptoms for return to an emergency department and consideration of further studies. Will consider studies as appropriate and discuss with the patient. 
Will assist with oral or IV hydration as the patient tolerates. I feel a pulmonary or cardiac component is unlikely at this time base on the history and exam.

Best practices

• We suggest using templates only where developmentally appropriate

  – Not in 3rd year except for certain types of visits
    • Well child, physicals

  – More appropriate for Acting Interns
    • Still need to free text HPI, assessment
    • Need to teach proper use of templates
Note bloat

- Copying / pasting
  - Lack of clinical reasoning
  - Lack of engagement with information
  - Lack of thinking about problem

Patient-Centered EHR Use
EHR Use = Distracted doctoring

- Back to patient
- Poor eye contact
- Computer guided questioning
- Long silences
- Typing during sensitive discussion
- Miss non-verbal cues

Improving Patient-Centered Technology Use (iPaCT)

Lee WW, Alkureishi ML, Farnan J, Arora V
University of Chicago School of Medicine
Honor the ‘Golden Minute’
Use the ‘Triangle of Trust’
Maximize Patient Interaction
Acquaint yourself with chart
Nix screen
Let the patient look on
Eye contact
Value the Computer
Explain what you’re doing
Log off

Curriculum during late 2nd year
Knowledge and skills better after curriculum (self-report and OSCE)
Patient-centered EHR Use

Learner-centered EHR Use

Learner-centered EHR Use

• Prepping for visit: Teach learners how to review chart
Learner-centered EHR Use

When you are in the room with a patient and a student, you need to be aware of everyone’s position.
Learner-centered EHR Use
Can you find the patient?

• There are actual teaching and learning opportunities when one is using an EHR
  – When student is alone with the patient (after appropriate observation and feedback)
  – When student and preceptor are together with the patient
  – Holy Grail: direct observation while still being efficient
Student alone with the patient

Medication Reconciliation

(Video)

Student alone with the patient

Student performs screenings

(Video)
Student alone with the patient

- After visit summary
  - Can teach student and patient together
  - Preceptor creates AVS, student reviews with patient
  - Student creates AVS and reviews with patient

- Pending orders
  - Practice writing prescriptions, ordering tests and making referrals

Student and preceptor with patient

Teach student and patient together

(Video)
Direct observation of clinical interactions...

...while remaining efficient

Observation #1

(Video)
Observation #2

(Video)

Observation #3

(Video)
<table>
<thead>
<tr>
<th>7 Tips to Enhance Learner-Centered EHR Use</th>
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<tbody>
<tr>
<td><strong>Let students document in the EHR!</strong></td>
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<tr>
<td><strong>Educate learner &amp; patient while using EHR</strong></td>
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<tr>
<td><strong>Avoid cut/paste</strong></td>
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<tr>
<td><strong>Recognize when templates are developmentally appropriate</strong></td>
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<td><strong>Notes improve with feedback</strong></td>
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<tr>
<td><strong>End note bloat</strong></td>
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<td><strong>Remember the ‘diamond of trust’</strong></td>
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</table>
Students adding value to practices

- Quality improvement projects
- Health maintenance dashboard
- Panel management
- Systems-based practice
  - Integrating cost into order entry
Future Directions

• Clinical decision support systems
  – Enhance fund of knowledge
  – Guide learning
  – ‘Point of care’ education
  – Teach best practices
• Tracking learner exposures
  – Diagnoses
  – Procedures

Your thoughts? Feedback?

Scribes? Templates? Note bloat?

Do we observe students?

What do we expect day one of internship?

Who is advocating for learners in the EHR?

When and how do we teach all of this to students and residents and faculty?