

HOD Action: Council on Medical Education Report 2, I-11, adopted as amended and the remainder of the report filed.

REPORT OF THE COUNCIL ON MEDICAL EDUCATION

CME Report 2-I-11

Subject: Medical Student Access to Electronic Health Records

Presented by: David E. Swee, MD, Chair

Referred to: Reference Committee K
(D. Robert McCaffree, MD, Chair)

Resolution 5-I-10, Policy D-315.979 (AMA Policy Database), “Medical Student Access to Electronic Medical Records,” introduced by the Medical Student Section and adopted as amended, asks that our AMA: 1) encourage teaching hospitals and other clinical clerkship sites to allow medical student access to patient electronic medical records; and 2) study current barriers to, and help facilitate medical student access to, electronic medical records.

Interaction with the electronic health record (EHR) has the potential to contribute positively to medical student learning,^{1,2} but there may be negative effects on learning as well.^{3,4} Currently, barriers may exist to medical student access to the EHR. This report will describe the various categories of barriers that have been identified that, in many cases, have resulted in students assuming a mainly passive role as observers of the record. The report also will analyze the concerns that have been expressed about the effects of EHR use on student learning.

STUDENT ACCESS TO THE EHR

There is evidence that medical students interact with the EHR, but often only in a passive (i.e., “read-only”) way. A survey conducted during the 2005-2006 academic year showed that students in about 90% of medical schools had access to an EHR in clinical settings used for at least some required clinical clerkships. However, the type of access to the EHR varied across institutions and hospital types. Medical school or university-owned hospitals, as a group, provided no more ability for medical students to actively enter information into the EHR than other hospital types. VA hospitals, in general, were more likely to allow students to enter or modify information in the record than other hospital types.⁶

These data support other literature² that indicates that opportunities for medical student access to the EHR are neither ubiquitous nor optimal.

BARRIERS AND LIMITATIONS

The barriers and limitations to student interaction with the EHR can be categorized into several distinct areas, which are, in some cases, not totally independent of each other.

Legal and Regulatory Requirements

In 1994, the federal Health Care Financing Administration (HCFA), now the Centers for Medicare and Medicaid Services (CMS), issued new guidelines for documenting evaluation and management services under Medicare. The regulations that required physician presence in patient care

1 situations led to a series of audits of Medicare billing at US teaching hospitals.⁵ The regulations
2 and the succeeding Physicians at Teaching Hospitals (PATH) audits form the basis of some
3 concerns related to the ability of medical students to “write” in the medical record. It was
4 interpreted at the time that, since the physician must write the note in the patient’s chart in order to
5 bill for the encounter, there was no reason for or ability of the medical student to write in the
6 record.⁷ It also has been stated as a concern that the originality or validity of the physician’s note
7 might be challenged if a medical student note of similar content was included in the record.^{3,4}

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9 Current analysis indicates that, while services provided by a medical student are not reimbursable,
10 students may document in the medical record in certain circumstances. The guidelines state that
11 the student may document the past family and social history and the review of systems.⁸ Other
12 components of the clinical encounter, including the history of present illness, the physical
13 examination, and the associated clinical decision-making must be performed and documented by
14 the attending physician.^{3,4,8} Failure to identify the original source of medical documentation that
15 results in inappropriate use of medical student documentation to support a bill to Medicare may be
16 considered to be fraud and abuse by the federal government.⁸

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18 Concern has also been expressed about potential liability if medical students can enter information
19 in the EHR.² The basis for this concern has not been described, but the issue was raised in more
20 than one survey of medical school leadership.² One basis for the concern may be the fact that notes
21 in EHRs can be copied and used in a subsequent patient encounter. This may lead to incorrect
22 information from a previous visit being carried forward^{2,4} or inaccurate information from a current
23 encounter becoming part of the future record.³ An additional concern may result from the potential
24 for the differences in the clinical information recorded by the attending physician and the medical
25 student and these difference might be included in a liability action against the physician of record.

26 27 *Educational Issues*

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29 There have been concerns expressed that the structure of the EHR may limit students’ development
30 of clinical reasoning abilities.⁴ The process of writing a patient note has been cited as a way for
31 students to prioritize and integrate clinical information.³ The fact that EHRs are template-driven,
32 where the recorder selects from a predetermined list, may mitigate students’ ability to acquire this
33 skill, though there have not been studies documenting this effect.^{3,4} Also, using medical students as
34 scribes to simply enter data into the record has been described as being of little educational
35 benefit.⁴

36
37 Using the EHR also may limit the process of student-patient interaction. About 50% of
38 respondents to a survey of medical students completing an ambulatory medicine/family medicine
39 clerkship indicated that they spent less time looking at the patient while using an EHR and only
40 two-thirds were satisfied with the quality of their communication with the patient in that
41 circumstance.¹ This result may be a function of the type of interface device that is used, the
42 learner’s limited experience with the EHR system, or the student’s need for prompting from the
43 system in deciding what questions to ask.

44 45 *Logistical and Structural Issues*

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47 One set of logistical concerns relates to the need for medical students to be trained in and be given
48 access to the EHR systems for multiple hospitals. Medical schools often have students rotate
49 through more than one hospital, even within a given clerkship. This requires that students be given
50 a log-in ID and password for each system, which can be costly and time consuming for an
51 institution.⁴

1 Training of medical students in the relevant EHR at the beginning of a clerkship or clerkship
2 rotation also takes time. In a medical school that uses multiple clinical sites for a given clerkship,
3 the time required for orientation to the various EHRs could detract from the time available for
4 clinical activities. Students may not have enough time to become familiar with the EHR system at
5 one hospital before they must move on to another site and system.⁴

6
7 Another barrier is the structure of the EHR. In the survey of medical schools cited above,⁶ about
8 one-third of schools reported that the structure of one or more of the EHR systems at their teaching
9 hospitals did not support students writing in the record; for example, there was no place in the
10 record for a student note.

11 EHR CHARACTERISTICS THAT WOULD MITIGATE COMPLIANCE CONCERNS

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14 The following recommendations have been made to facilitate compliance when medical students
15 participate in EHR systems:⁸

- 16
17 • A medical student formal note in the record should only include the review of systems and
18 the past family and social history. Any other documentation by a student should not be
19 able to be copied. This includes incorporating a system that limits the ability for others to
20 use student notes.
- 21 • If scribing by a medical student is permitted, it is desirable for the EHR to allow a clear
22 definition of whether a note has been scribed or has been written for educational purpose.
23 The EHR should allow for real-time identification of the author of any note.
- 24 • A student's note should be able to be edited for educational purposes.

25
26 Some of the currently used EHR systems have the ability to incorporate elements of the above
27 recommendations into their system but have been slow to do so without clear consensus from the
28 medical education community

29 SUMMARY AND RECOMMENDATIONS

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32 In general, data indicate that medical students have access to EHRs in institutions where they exist.
33 However, such access is often limited to a "read only" category, where the student cannot enter
34 information into or actively interact with the record. While barriers and concerns exist, the ability
35 of medical students to add notes to patient records is believed to be important for their education.^{2,4}
36 Future medical practice will involve EHRs as a tool to record patient information, so medical
37 students should be familiar and comfortable with their operation and characteristics. EHRs should
38 be constructed so as to permit student access.

39
40 There is some evidence that medical students are being prepared. In the 2010 Association of
41 American Medical Colleges Medical School Graduation Questionnaire, 91% of the 13,253 fourth-
42 year medical students who responded agreed that they had the "appropriate knowledge and skills to
43 use a computer-based clinical record keeping program, both for finding and recording patient-
44 specific information."⁹ However, research on the use of EHRs in medical education and their
45 impact on learners is limited.¹⁰

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47 The ability to support access of medical students to an EHR will require overcoming the barriers
48 and concerns that have been identified.

1 Therefore, the Council on Medical Education recommends that the following be adopted and that
2 the remainder of the report be filed.

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- 4 1. That our American Medical Association recognize the educational benefits of medical student
5 access to electronic health record (EHR) systems as part of their clinical training. (New HOD
6 Policy)
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- 8 2. That our AMA encourage medical schools, teaching hospitals, and physician practices used for
9 clinical education to utilize clinical information systems that permit students to both read and
10 enter information into the HER, as an important part of the patient care team contributing
11 clinically relevant information. (Directive to Take Action)
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- 13 3. That our AMA encourage research on and the dissemination of available information about
14 ways to overcome barriers and facilitate appropriate medical student access to EHRs and
15 advocate to the Electronic Health Record that all Electronic Health Record vendors incorporate
16 appropriate medical student access to EHRs. (Directive to Take Action)
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- 18 4. That our AMA rescind Policy D-315.979, "Medical Student Access to Electronic Medical
19 Records." (Rescind HOD Policy)

Fiscal Note: Less than \$500.

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