



Survey Instrument: Student Training in Electronic Health Records

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Welcome!

This survey was developed by the American College of Physicians Education and Publication Committee with collaboration from the Internal Medicine Education Advisory Board (IMEAB) of the Alliance for Academic Internal Medicine (AAIM). The IMEAB is conducting this survey to explore whether medical schools provide a sound educational experience for students as it relates to the Electronic Health Record (EHR). All results will be reported *in the aggregate* and used for scholarly or informational purposes.

This survey should take about *15 minutes* to complete. Your responses will be collected using Secure Socket Layer (SSL) encryption and will remain confidential at all times. Please use the survey “<Back” button to return to a previous page (*NOT* your browser’s back button). Be sure to answer *carefully*: due to the use of survey logic, if you return to a previous page, the data from the page that you left will *not be stored*. We encourage you to take this survey in one sitting, but if you must pause and return later, simply click “*Save, Exit, and Continue Later.*” You will be prompted to enter your email address to receive a continuation URL, but your email address will never be used by the survey software for any other purpose than sending a survey link to you. If you encounter *technical problems*, please contact AAIM staff at surveys@im.org or (703) 341-4540.

You are being asked to participate in a research study of student training in the use of electronic health records by completing this anonymous online survey. You must be at least 18 years old to participate in this research.

Participation in this research project is completely voluntary. You have the right to say no. You may change your mind at any time and withdraw. You may choose not to answer specific questions or to stop participating at any time.

If you have concerns or questions about this study, such as scientific issues, how to do any part of it, or to report an injury, please contact the researcher (Heather Laird-Fick, MD, MPH; 965 Fee Road, A106 East Fee Hall, East Lansing, MI 48824, 517-355-0264).

By clicking on the button below, you indicate your voluntary agreement to participate in this online survey.

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Q1. Beyond technical training in how to use a specific electronic health record (EHR), does your school have formal coursework or a curriculum dedicated to use of the EHR?

1. Yes [GO TO Q2]
2. No [GO TO Q7]

[Page Break]

Q2a. How was this coursework/curriculum developed? *(Check all that apply.)*

- a. At your local institution
- b. Through a commercial EHR training product
- c. Other (please specify): _____

Q2b. What is the structure of this coursework/curriculum?

1. An independent, stand-alone course
2. A component of other curricular content (such as an Introduction to Clinical Medicine or Doctoring course)
3. Other (please specify): _____

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Q3. When does this coursework/curriculum primarily take place?

1. During preclinical training
2. Immediately before beginning the start of clinical training
3. At the end of clinical training
4. At different times across both preclinical and clinical training
5. Other (please specify): _____

Q4. What topics are covered in this coursework/curriculum? (Check all that apply.)

- a. Technical use of the EHR at your primary teaching institution (e.g., how to log on, enter documentation and orders, etc.)
- b. How to document appropriately in the medical record (i.e., what information and in what form it should be entered)
- c. Appropriate use of documentation and editing tools (such as use of templates, “cut-and-paste” capabilities and carrying previous notes forward)
- d. Confidentiality and ethical issues associated with EHR use
- e. Communicating with colleagues (and patients, if applicable) through the EHR
- f. Documentation of specific diagnoses and levels of service for billing documentation
- g. How to use other functions of the EHR, such as clinical decision aids (e.g., UptoDate), patient instructions and educational materials, etc., as applicable
- h. Medication reconciliation
- i. Population health/quality activities using EHR data
- j. Other (please specify) _____

Q5. Does the EHR coursework/curriculum include simulation activities?

1. Yes
2. No

Q6. Are students assessed in their use of the EHR before being able to *access* a functioning clinical information system?

1. Yes
2. No

[Page Break]

Q7. At what proportion of your teaching sites are students allowed to *access* the EHR during their core clinical rotations (i.e., clerkships)?

1. All of them **[GO TO Q8]**
2. Some of them **[GO TO Q8]**
3. None of them **[GO TO Q18]**

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Q8. What limits are placed on this access?

1. None Universal access is allowed across all clinical rotations
2. Access is limited by specific rotation and terminates at the end of that rotation **[Display Q9 and Q10]**
3. Other (please specify) _____ **[Display Q9 and Q10]**

Q9. What is the reason(s) for these restrictions on access? *(Check all that apply.)*

- a. Administrative/technical complexities of providing student access
- b. Medicolegal concerns with student documentation in the medical record
- c. Patient privacy/HIPAA compliance concerns
- d. Potential billing documentation compliance liability
- e. Other (please specify): _____

Q10. What type(s) of access is available to students? *(Check all that apply.)*

- a. Read-only
- b. Access to only specific areas of the EHR
- c. Other (please specify): _____

Please continue!

[Page Break]

Q11. Are your students allowed to *document* in the EHR during their core (i.e., clerkships) clinical rotations at your primary teaching institution?

1. Yes **[GO TO Q12]**
2. No **[GO TO Q16]**

[Page Break]

Q12. How can students *document* in the EHR during their core clinical rotations; at your primary teaching institution? *(Choose the most appropriate response.)*

1. In a separate student section that is not a permanent part of the EHR (i.e., for educational purposes only)
2. In a separate student section that is a permanent part of the EHR
3. Directly in the active EHR (along with residents and attendings)
4. Other (please specify): _____

Q13. Can student documentation in the EHR be modified or corrected by faculty?

1. Yes
2. No

Q14. Are students routinely provided feedback on their documentation in the EHR by faculty?

1. Yes **[Display Q15]**
2. No

Q15. What type of feedback is given to students regarding their documentation in the EHR?

1. Formative (e.g., early on, as students begin to document in the EHR)
2. Summative (e.g., after students have completed a rotation)
3. Both formative AND summative

Please continue!

[Page Break]

Q16. Are students permitted to enter and pend orders into the EHR during their core clinical rotations?

1. Yes
2. No

Q17a. Does student access and ability to use the EHR increase over the course of training at your primary teaching institution (e.g., students in advanced courses such as an acting/subinternship are allowed more EHR privileges than core clerkship students)?

1. Yes **[Display Q17b]**
2. No

Q17b. Please describe these additional privileges:

Q18. If there are significant limitations on access or use of the EHR by students in your institution, please indicate the reason(s) you have been told these restrictions apply.

[Page Break]

Q19. Do your students rotate at other clinical training sites that use a different EHR than the one at your primary teaching institution?

1. Yes **[GO TO Q20]**
2. No **[GO TO Q23]**

[Page Break]

Q20. Are you aware of the specific training and privileges students are given in the use of the EHR at each training site?

1. Yes
2. No

Q21. Approximately how many different EHR systems are your students required to interact with in the course of their clinical training in medical school?

1. 2
2. 3
3. 4
4. 5 or more

Q22. How would you best describe the educational impact related to the use of multiple EHR systems during the course of medical school training?

1. Very positive
2. Positive
3. Neutral
4. Negative
5. Very negative

[Page Break]

Q23. What is your level of agreement with the following statements?

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
As currently structured at my institution, student contributions to the EHR add meaningfully to the patient care process.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
As currently structured at my institution, student use of the EHR provides an educationally meaningful way of teaching this aspect of patient care.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q24. Please indicate any specific change(s) to student use of the EHR at your institution that would make this interaction more educationally and clinically meaningful for students.

[Page Break]

Q25. Is the ability of students to effectively use the EHR a specific component of their overall medical school evaluation?

1. Yes
2. No

Q26. Is demonstration or attestation of competency in using an EHR a requirement for graduation?

1. Yes
2. No

Q27. To what degree do you believe that training students in use of the EHR system (as currently structured in your institution) adequately prepares them to assume the duties of a postgraduate trainee?

1. To a very high degree
2. To a high degree
3. To a moderate degree
4. To a small degree
5. To no degree

[Page Break]

Q28. If you have any further comments about this survey subject or about the survey itself, please include them below.

On behalf of the AAIM Internal Medicine Education Advisory Board, thank you for taking the time to complete this survey!

Please click "DONE" to submit your responses and exit the survey.

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