Reviewer's report

Title: Electronic Health Records in Outpatient Clinics: Perspectives of Third-Year Medical Students

Version: 1 Date: 19 November 2007

Reviewer: Richard Hillestad

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Review of the paper, “Electronic Health Records in Outpatient Clinics: Perspectives of Third Year Medical Students”, written by Rouf, Chumley and Dobbie.

The authors correctly surmise that there is a paucity of information about the impact of the EHR on medical education. This paper attempts, through a survey of 3rd year medical students who have had some limited experience with an EHR, to help to fill that gap.

The results of the survey are not surprising and reinforce some of the literature about issues and benefits of an EHR in clinical care. Nevertheless, it is probably useful to add these results to the general literature about EHRs.

The primary concerns I have about the survey and conclusions is that it is a relatively limited sample and pertains to one specific EHR at a certain stage of implementation and with limited training of the students. So, we do not know how much the design of the specific EHR has affected the results, how much the limited training has affected the results, and how much the setting and process around the EHR has affected the results. For example, one of the more important observations is the potentially negative impact that working with the EHR in the presence of the patient has on physician-patient communication. Others have made this observation, but it also seems to depend on the communication ability of the physician—good communicators seem to do just fine with an EHR in hand, but poor communicators tend to use the EHR as a crutch and it inhibits direct communication. I would want to find out what there was about the use of the specific EHR that inhibited communication. Some follow-up questions in a second survey would be useful. In fact, one useful output of the paper would be suggestions on how the survey might be improved. My suggestion would be to ask questions that get to a finer level of detail—Why was it easier to find essential information in the EHR? How did the prompts lead you to ask more history questions or order more preventive services, etc.?

The papers authors indicated a desire to show the effect of the EHR on the clinical education process, but most of the questions and results focus on the EHR and usefulness in clinical practice. What did the students learn about working with an EHR relative to not having an EHR? What changes in the clinical process were necessary with an EHR? What things were easier with an EHR?
What features of an EHR would you want in your own clinical practice? What kind of training is necessary to use the full capabilities of an EHR?, etc.

The ease of use and incentives for use of an EHR depend heavily on the design and features embedded in it. A little more commentary about the specific EHR and implementation would provide the readers of this article additional, useful perspectives.

In general, the article should be publishable with some revisions and additions as suggested above.

The method is ok, but its limitations as noted above should be acknowledged.

The article will be of limited interest to the community but does add marginally to the body of knowledge about EHRs and getting student perspectives is important for moving the field ahead.

The article is well written and the English is quite acceptable and understandable.

I do not see the necessity of a review by an expert statistician. I am sure that a survey expert would have some criticisms about the questions, sample and conclusions, but I think that most of the limitations of this survey are apparent from the description.

Declaration of Peer Reviewer Competing Interests:

During the past 5 years I have performed studies of the costs and benefits of health information technology. Those studies, published in peer reviewed journals, were funded by consortiums of EHR and IT companies that could have an interest in the conclusions of this study. I declare that I have no competing interests in relationship to the paper being reviewed and that these past funding relationships have had no influence on my review.