Author’s response to reviews

Title: Computerized Clinical Documentation System in the Pediatric Intensive Care Unit

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Response to Reviewers:
Dr. Conley's review had no suggestions.
Dr. Hammond's review had a number of questions. We have attempted to clarify the paper to address some of his questions, however, there were some that would require repeating the study and we couldn't address them in this paper, but may address them in a future study.
1) We have added information about the nature of the PICU i.e. # of admissions, LOS, ADC and bed number.
2) The paper clearly states that the system is used by nursing, lab and respiratory therapy to document. Dr. Hammond may have missed the statement.
3) Since we are now only working on computerized order entry, the only logical medication error we could determine would be delay in administration of meds. Dr. Hammond is right that it probably doesn't matter for most medications but it does for some. I think the take away piece of information from our study is that we uncovered an problem in the paper documentation that we were not aware of.
4) As far as the laboratory normalization time is concerned, our hypothesis is clearly explained in the paper, however because the paper chart was so deficient noting times of reporting it was impossible for us to test the hypothesis.
5) As for the nursing documentation, this was assessed by a chart audit. For most categories it was a yes or no as to whether it was present or not, in one, (did the nurses notes reflect the care plan) was there any interpretation. After rereading the manuscript, it seems to be fairly clear as written.
6) As for the managerial control of the nurse manager, we have tried to clarify it in the manuscript.

7) We did not compare the automatic logging of data from the HP system to that of the human. However, when we installed and tested the HP System the automatic logging was error free.

8) Cost data are stated in our manuscript. We took the cost of the hardware and software and divided by patient days over three years and found that the cost was $24/patient day. We did not do any other analysis and can’t respond to Dr. Hammonds comments.

9) We have enhanced our description of the system to answer Dr. Hammonds questions about page 8.

10) We did not test the transcription rate since most of the documentation is from pick lists. Very little typing is required.

11) CDS audit took about 20 minutes from the start of the sql coding till the report was printed - I don’t have any more information than that. The take away point here is that the computerized audit was much faster than the paper audit.

12) We addressed his comments about shift change with additions to the manuscript. However, the information we tried to capture, was not the process, but rather the reaction of the users to the change in process.

13) We have not found any new references that adds anything to the current references.

We trust these comments and the changes in the manuscript will be satisfactory. In addition, Dr. Broner is quite ill and has no current e-mail address. I have listed my e-mail address for her.

Submitted by James Menke, MD,MS