Author's response to reviews

Title: Improving teaching on an inpatient pediatrics service: a retrospective analysis of a program change.

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Author's response to reviews: see over
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Re: Manuscript Revision: 8844887606917287

Dear BMC Medical Education Editorial Staff:

My co-authors and I are pleased about the provisional acceptance of our manuscript entitled, “Improving teaching on an inpatient pediatrics service: a retrospective analysis of a program change.” We greatly appreciate the thoughtful peer reviews of the referees. We are submitting this letter as well as a revised manuscript to respond to the suggestions and clarify any comments.

Referee #1 did not seem to have any specific concerns to which we were expected to respond. He stated, “This is a very sound helpful article on a topic with which many paediatricians struggle. Well-designed with appropriate statistics. Findings are of relevance to paediatricians internationally.”

Referee #3 suggested no minor or major revisions.

The comments of Referee #2 were more detailed and we respond to the comments below.

Minor Essential Revisions:

Reviewer Comment: In the results section the authors describe an "average" of 26 faculty members per year from 2006-2008. The authors then list faculty members from several departments but then combine all the evaluations into one score. Was there a difference between generalists and subspecialists in either the ward attending evaluations and/or the teaching attendings evaluations. This would be of extreme importance for those interested in medical education research and programmatic development.

Authors’ response: We appreciate the reviewer’s insight on the potential implication of differential teaching ratings of generalists vs. specialists. We had considered this analysis. Some of our reasoning for not pursuing it included the following: Of the 46 necessary ward and teaching attending blocks, 20 are available for medical student teaching attending. Of these, on average 17/20 are covered by generalists, making comparisons difficult due to the small number of comparisons for “specialists.” Of the 26 available ward attending blocks, an average of 8 are fulfilled by “specialists.” Of these 8, one-half (n=4) have general practices, including Emergency Medicine, and Adolescent Medicine, Infectious Diseases. Again, the small number of rotating physicians who are strict subspecialists (cardiology, genetics, hematology, endocrinology),
limited this comparison. In our efforts to maintain some brevity to the manuscript we did not include this detailed rationale. At the editor’s discretion, we would be happy to include more detail about this limitation in the text.

**Discretionary Revisions**

Reviewer Comment: Would reduce the length of the abstract, particularly the background section and also include the actual OR in the results section of the abstract.

Authors’ Response: These changes are reflected in the revised manuscript.

Reviewer Comment: Under the heading, "Original Program;" the authors write, "In 1996, the Chairman of the Department of Pediatrics created an additional faculty position--the teaching attending-- to serve on each of the two inpatient teams along with the ward attending." Does this mean there was 2 ward attendings and 2 teaching attendings, or a different combination?

Authors’ Response: There is a teaching attending and a ward attending for each general pediatric inpatient team. This has been clarified in the manuscript.

Reviewer Comment: I am not sure the comments from medical students in either the Original Program section or the Results section is particularly necessary. The authors don't list whether comments were specifically analyzed for themes in a rigorous manner or were just random extracted comments. It can also reduce the length of the paper without jeopardizing its main themes.

Authors’ Response: We removed these quotes in the revised manuscript and replaced with a brief summary statement.

Reviewer Comment: On page 8, I would rephrase, " We also sought funding from Johns Hopkins Hospital noting that the increased presence of the clinical ward attending would lead to efficiencies in timely patient discharge, decreased readmissions, and improved patient safety." This is highly speculative and is not borne out by the data, especially earlier patient discharge and readmissions.

Authors’ Response: The reviewer’s comments about the speculative nature of this rational are well taken and appreciated. While we used this rationale as a “selling point” to the hospital to procure funding, we were not successful. Therefore, the wording regarding this speculation has been removed from the manuscript.

Reviewer Comment: I would like the authors to address two of their findings: a) Why do you think that no significant changes were seen in the residents' perception of the attendings’ commitment to teaching, and b) There were no significant improvements seen in the perception of attending medical knowledge or the attending physician's appeal as a role model. It is in this particular area where the author's lessen the potential interest of their paper by all but ignoring the impact of hospitalist educators. For example, the authors are referred to a study by Geskey et al. Journal of Hospital Medicine 2007;2:17-22, where hospitalists score significantly higher as effective teachers, pediatricians, and student advocates, where being a role model was one of the domains under effectiveness as pediatrician. In addition, Natarajan et al. Journal of Hospital Medicine 2009;4:490-8, in Table 2 lists the number of studies where trainee ratings compared hospitalist vs. non-hospitalists-- both feedback delivery and effectiveness as a role model were
higher in the hospitalist category. In addition, the author's cite the study of Wright in their bibliography but both Geskey and Heydarian, Current Problems in Pediatric and Adolescent Health Care 2012;42;120-6. note that spending 25 or more hours per week teaching was independently associated with being considered an excellent role model. Reviewing Table 1 in their manuscript regarding the expectations of a Ward Attending, are the 21 hours per week of clinical care done with the learners or independently, because if its independently, then the ward attending would not get 25 direct contact hours per week. Again, the authors should explain Why would there be a dichotomy in positive results between some of the survey items and the role model question?

Author Comment: Regarding residents’ perception of attendings’ commitment to teaching, the reviewer is correct. Our odds ratios for the intervention years ranged from 1.2 - 1.5 without significant confidence intervals. In considering possible reasons, we note that our baseline rating (62% rating as superior) was already quite strong. It is possible that, given the value judgment inherent in a question which asks about “commitment,” we reached a rating ceiling. Other possible reasons are the expected variability in a group’s answers to a question of a complex and abstract character trait such as “commitment.”

Regarding the medical students’ perception of their teaching attending’s medical knowledge, the reviewer also correctly notes that there were no significant changes seen. Again, our ratings begin ≥85% “superior” at baseline, reflecting the high regard of medical students in their teaching attending’s knowledge before the intervention. More importantly however, is our specific program aim which stresses the role of the teaching attending to focus on problem solving, clinical reasoning, physical assessment / exam skills and giving feedback, over the delivery of medical knowledge to students.

As for the medical students’ ratings of teaching attendings’ appeal as a role model being no higher in the intervention years, we appreciate the reviewer pointing out the findings noted in the paper by Geskey, et. al., which dealt with medical students. In response, we note the following: The OR’s for these questions for the medical student teaching attending demonstrated a trend toward significance but did not achieve it (2.1 and 2.3 for the intervention years). Similar to the comments above re: “commitment,” one must also consider the complexity of a “role model” question. The overwhelming majority of our current medical students at Johns Hopkins seek medical or surgical subspecialty residency / fellowship training. It’s possible that, despite the intervention, and given the high appeal of the faculty as role models at baseline (>75% rating as superior), our student cohort may be judging role modeling on many different factors (i.e., modeling the particular specialty a student is interested in).

As for residents ratings of faculty ward attending appeal as a role model, we did find a significant improvement in ratings in the second intervention year, OR=1.9 [1.1-3.3]. Given that the sum total of the ward attendings’ responsibilities equates to > 25 hours per week teaching, and since teaching is commensurate with the clinical care of patients, our findings are consistent with the paper by Wright, et. al., which focused on housestaff. We have made some minor changes in the discussion to reflect this information. The authors would be pleased to incorporate the more detail (as above) into the manuscript, but have concerns about the length it would add to the paper.

Reviewer Comment: Which leads me to my final constructive criticism: To blindly ignore the role of hospitalists in medical education and use the results of their study to validate their current teaching structure limits the ability for decision-makers to decide which model is best for
learners and their institution. Especially perplexing is their conclusion that ... we have been able to create a sustainable model... but a few sentences earlier they write, "Given the current financial environment, this funding may be threatened in the future...." I think the authors demonstrate a system that improved their institutional results but it is highly questionable that it is better than a hospitalist model, or more sustainable taking into account the financial pressure academic medical centers are under. The paper could be much better if the authors took more of a holistic approach in their discussion to current medical education models rather than just examining their historical institutional development.

Author Comment: In our the original manuscript discussion, we state, “While hospitalist systems have also been able to demonstrate effective teaching, our system is a different clinical care model.” In stating this, we intended to recognize some of the excellent teaching advances that the pediatric hospitalist movement has achieved. We did not intend to suggest our model was “better” for one institution or another. We rather sought to report our findings of improving education in a traditional faculty system in an institution which has a single promotions track. We have created this system as an alternative to a hospitalist system and we are pleased that we have been able to achieve some educational benefits. Many of our faculty are active in leadership and positions in the national pediatric hospitalist movement and as such, most faculty consider themselves hospitalists during the time in which they are responsible for the inpatient service. Given that the clinical revenue of our inpatient billing in our State can be quite limited, we are always mindful of funding threats to a program that is built on faculty compensation. However, we have demonstrated that we have been able to sustain this system for over 5 years since its inception.

Once again, my authors and I are honored to have the prospect of our work appear in your medical journal. Please inform me of any additional steps necessary or any additional suggested revisions.

Sincerely,

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