Reviewer’s report

Title: Impact of a Competency Based Curriculum on Quality Improvement Among Internal Medicine Residents

Version: 2 Date: 1 July 2014

Reviewer: Jason Frank

Reviewer’s report:

Thank-you for this manuscript. It will be of some interest to those who wish to enhance QI education in the health professions.

1. Overall the writing is clear.

2. Some minor grammatical errors are found in the text, warranting a careful re-read.

3. Line 50: "Since" should probably be "In"

4. Line 119: "scheduled" seems to be missing a word after it

5. The p values, while showing statistical differences between the populations, probably are less important than what is deemed educationally significant. Please define what you would deem "educationally significant" in your methods & discussion.

6. Along the same lines, I suggest you calculate and report on the Cohen’s d score for your results if you can.

7. As in many meded research literature, there are numerous threats to validity in the design of this study. While you have listed a number of outcomes, as a reader I would have liked to hear more about the implementation of the actual QI projects.

8. Most of the measures are truly subjective. The change in QI confidence and QI skills are self-report with several potential biases.

9. While I have not used the QIKAT myself, I did pull the papers and reviewed the related websites. It requires a subjective score by an assessor of the comments, opening up significant bias. Also, using the same 3 cases (readily available on the web) is concerning for introducing additional significant threats to validity. And I would be concerned about test-retest bias with the same cases, even 12 months out. This puts all the results into question, unfortunately.

10. I think the conclusion is overstated in the abstract. The emphasis should be on perceived change in QI skills, in my opinion.

11. I believe much of the narrative results in the "Performance" section should be
moved to the Discussion since it seems to represent the opinion of the authors.

12. Overall, I do think this is worth publishing, in order to allow others to build on this work.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests