Reviewer’s report

Title: Supervision as a tool for building surgical capacity of district hospitals: the case of Zambia

Version: 1 Date: 13 Dec 2019

Reviewer: Nathan O'Hara

Reviewer's report:

I commend the authors are their investigation of a unique approach to improving the quality of surgery performed by non-physician clinicians in low-resource settings. The qualitative findings were nicely presented and the discussion added useful context.

My primary concern is that the structure of the supervisory program is not described. For this intervention to be replicated, please detail how the supervising surgeons were recruited for the program, the incentive structure used to encourage the surgeons to visit the MLs working in the DLHs, and the proportion that adhered to quarterly visits.

Once the supervisory program is described in the Background, please include a section in the Discussion on how the program should be changed based on the findings of the study. Currently, the eight paragraph in the Discussion describes the barriers to the success of the intervention. However, the barriers described are resource challenges. It would be helpful to know more about operational barriers, such as compensation to the surgeon, scheduling issues, who assigned the ML - surgeon pairs.

In the Sampling section of the Methods, please report how many eligible MLs, DMOs, and supervising surgeons the sample was selected from.

Level of interest
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An article of importance in its field

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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I have stock options in Arbutus Medical, Inc., a company that develops products for surgery in low-resource settings.

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