Reviewer's report

Title: Potential consequences of expanded MUAC-only programs on targeting of acutely malnourished children and ready-to-use-therapeutic-food allocation: lessons from cross-sectional surveys

Version: 0 Date: 05 Nov 2019

Reviewer: Liza Bowen

Reviewer's report:

This is a useful analysis using a large dataset from multiple settings. The rationale, methods, results and implications are clearly laid out.

Some possible points of clarification to consider:

- You have suggested in your discussion the need for more detailed studies on cost effectiveness of the "expanded MUAC only" approach in severely resource constrained environments. If there is some literature/data on the extra resource/time required for measuring weight for height and oedema in addition to MUAC, this would be useful in contextualising the extra costs from the RUTF allocation increase.

- Are there any likely physiological country differences that explain the country differences in misclassification?

- The figures are very useful. Can you clarify in figures 3a and 3b what the x axis represents?

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

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

Acceptable

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