Reviewer’s report

Title: The cost-effectiveness of incentive-based active case finding for tuberculosis (TB) control in the private sector Karachi, Pakistan

Version: 2 Date: 25 Jul 2019

Reviewer: Tom Wingfield

Reviewer's report:

Dear Authors,

Thank you for the opportunity to review this excellent piece of research, which falls across two important areas: active case finding and public-private mix. This is made all the more important by also presenting data from a TB endemic setting with high use of both public and private facilities and, as mentioned by the authors, issues regarding TB case notification to the national TB program.

I note that this manuscript has been extensively reviewed before and that I have been asked to review at a relatively late stage due to some previous reviewer comments.

Overall, the study design, methods, analysis, and write-up are sound and I would like to see this important article published. I only have two points for clarification prior to publication please:

1) I tend to agree with reviewer 1's issue with the "parallel" ACF vs PCF Markov model and analysis. I understand why the authors have opted for this method and think they have done their best to respond to the reviewer's comments and update the analysis. My only concern is with how the parameters for "no case finding" arm were derived. I note the two references from Lancet ID and PLOs One (refs 17 and 34) which are used in this instance. Please can the authors clarify:

a) How was the "no case finding" comparator calculated? By this, I mean is this an estimate of those cases passively found in both the private and the public sector (e.g. all cases in the study district) or just the private OR public sector?

b) The authors note that there was no cross over of patients in their study. This seems remarkable given the numbers of patients who routinely seek diagnosis and care across both public and private sectors during their patient journey, especially in the south Asian context. Is this correct and, if so, how was this verified?
Thank you to the authors for their hard work and important research.

Yours sincerely,

Dr Tom Wingfield
Senior Clinical Lecturer and Honorary Consultant Physician in Infection, Liverpool School of Tropical Medicine

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

No

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

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