Reviewer’s report

Title: Predicting Smear Negative Pulmonary Tuberculosis with Classification Trees and Logistic Regression: a cross-sectional study

Version: 1 Date: 12 September 2005

Reviewer: Brian G Williams

Reviewer’s report:

General

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

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Discretionary Revisions (which the author can choose to ignore)

This is an interesting paper and is clearly written. However, I should like to see two additions to the paper which would strengthen it considerably. First of all, the sample sizes are rather small (which in itself is not a problem) but for this reason it would be useful to have error limits on the estimates of specificity etc. Secondly, and perhaps more importantly, it is not clear what this is to be compared with. If this algorithm were not available diagnoses of smear negative TB would still have to be made, presumably by a clinician of some kind. (At the very end of the paper there is mention of ‘health care workers’.) What I should like to see is an estimate of the specificity etc. as obtained in whatever the conventional or alternative system is. For this to be a useful addition to what is currently done one needs to know how good the current system is. If what is already being done is very accurate then the proposed algorithms are of less value; if what is already being done is quite unsatisfactory then this becomes a very attractive alternative.

What next?: Accept after discretionary revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

I declare that I have no competing interests.