Reviewer’s report

Title: Prediction models for the risk of gestational diabetes: a systematic review

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Reviewer: Abell Sally

Reviewer's report:

This is a challenging review and the authors have recognised the major limitations - that the samples where these predictive models are derived have varying epidemiological characteristics and risk factors (which is why international risk factor screening varies so much!), and that the diagnostic criteria and screening strategies used for GDM are highly variable. A few issues to address - The definition of GDM 'any form of hyperglycaemia during pregnancy' needs to be updated (see current ADA guidelines). They state incidence of GDM has risen rapidly and ranges 3-35% - suspect these are prevalence estimates as the incidence has not risen that significantly. Results: study selection paragraph - number of studies excluded does not add up correctly - What was methodology used to assess risk of bias? Please provide a reference for this method - Some minor grammatical issues throughout the paper that need addressing. This form of systematic review has a lot of short-comings as you are combining models used for different purposes and this needs to be taken into account eg. some models examine only nulliparous women as these are the women where risk prediction is most challenging, some include porous women; are these models being used to stratify risk of GDM eg. low risk versus high risk and then screening only high risk women at 24-28 weeks, or are they performing universal screening. Do you have any way to account for this within your review? Variable screening and diagnostic criteria is a significant limitation - can you group results and do a sub-analysis according to criteria used? Studies examining predictive models also use different methods for their sensitivity and specificity or probability cut offs. eg. Nanda (model 4) explored fixed false positive rates. Has this been considered where you refer to the "best predictive models" because this makes them difficult to compare.

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Quality of written English

Please indicate the quality of language in the manuscript:

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