Reviewer's report

Title: Projection of the Year 2050 Burden of Diabetes in the U.S. Adult Population: Dynamic Modeling of Incidence, Mortality, and Pre-Diabetes Prevalence

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Reviewer: Wendy A Davis

Reviewer's report:

I was privileged to be asked to review this article.

The aim of the authors was to provide contemporary, realistic estimates of the growth of the national diabetes problem. Whilst not novel, previous estimates are out-of-date. Novel aspects of the modelling are the inclusion of the impact of undiagnosed diabetes on total diabetes prevalence and the higher risk of developing diabetes in the sub-population with pre-diabetes.

The working behind the modelling and inputs for the modelling were very clearly set out in the Appendices such that, as the authors state in their discussion, the methodology could be used in other countries with reliable census data with substitution of country-specific data elements. Application of the model to other chronic diseases is also a possibility.

The assumptions used for the modelling appear reasonable and the data inputs sound.

The discussion and conclusions are well balanced and adequately supported by the data. If anything, the dramatic increase in diabetes prevalence predicted and the implications for health care provision are understated.

Both the title and abstract accurately convey the study's findings.

Level of interest: An article of outstanding merit and interest in its field

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests.