Reviewer’s report

Title: Diabetes treatment intensification and associated changes in HbA1c and body mass index: a cohort study

Version: 0 Date: 17 Feb 2016

Reviewer: Jonathan Bogan

Reviewer’s report:

This manuscript describes a retrospective analysis of a VA cohort to shed light on the relationship between what agents were used for intensification of therapy to control glycemia, degree of glycemic control as assessed by HbA1c, and BMI. The investigators studied a large number of individuals, using pharmacy records and other data. The main findings are that 50% of individuals who initiated treatment with metformin required intensification of therapy within 4 years. This was primarily with a sulfonylurea, however insulin was used later in the analysis. Intensification was mainly by addition of a sulfonylurea, TZD, or insulin, or by changing to insulin monotherapy. These had similar effects on glycemic control, and weight gain was noted in individuals receiving insulin.

The manuscript is well written, and the analysis appears to be sound. The results are not especially novel, but will add to the current literature on intensification of therapy after metformin monotherapy. Given that this is now the standard of care, and that current guidelines emphasize individualization of treatment, the current dataset can be very useful in providing guidance to physicians and their patients.

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?
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Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
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Yes
I recommend additional statistical review

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