Reviewer’s report

Title: Predictors of dropout in the German disease management program for type 2 diabetes

Version: 1 Date: 25 May 2011

Reviewer: Michael Green

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Major Compulsory Revisions

1. The section titled “Definition of dropout” describing the numbers and reasons of re-enrollments and missed/under documentation of follow up should be restructured and the analysis they did presented as either a table or figure. This would allow the reader to more easily assess the potential impact of using the authors’ definition of drop out on the results. This is important as using a different definition (ie. If re-enrollments for reasons of missed follow up were NOT counted as continuing, but rather as drop outs) would yield markedly different results. This impact should also be more clearly stated in the discussion section.

2. Results section: There is a lot of repetition of data in the text that is already present in the tables – ie. The ORs and 95% CIs need not be repeated in the text.

3. Most results are presented in table form while the results of the regression model stratified by retirement status are in a figure with text results for the ORs. It would be easier to follow if this was also in a table. It is also unclear to me why they conducted this stratified analysis. Was this an a priori expectation that was a part of the analysis plan or did it arise out of unexpected findings in the unstratified analysis? If it is the former, this intention and reasoning for it should be in the methods section. If the latter, they should explain why they did this in the results section.

4. In either limitations or discussion they should address the issue of enrolment bias. Ie. What impact is the voluntary nature of the program likely to have on drop our rates? Does is seem low due to failure to enroll non-compliant patients? Do they have any data on the proportion of diabetic patients in this particular plan that they could use to identify the magnitude of this issue for this particular target group? I think this is particularly important as their results seem to indicate that the further behind you are in adherence to recommendations (ie. Eye exam not done, foot status not assessed, smoking and nutritional counselling recommended) the more likely you were to dropout.

5. They should discuss which other factors are known to influence dropout rates that were NOT included in their model for reasons of lack of data such as information on socioeconomic status (education/income -?others)

Minor Essential Revisions
1. They need to provide a definition for “disabling secondary disease” as this is used in several of the tables.

2. In all the tables in would be helpful to include modify the label on recommended interventions by adding “at time of enrolment” or “at first visit” or “at any visit” to clarify if the timing of this recommendation was considered in the model (I think from the text they limited it to the former).

Discretionary Revisions

1. For most of the categories of interventions at baseline and their relationship to drop out the reference category represents one in which the patient is “compliant” so to speak with guidelines or targets (ie. Foot status normal, no admissions, not recommended to quit smoking- which implies non-smoker,etc.). The exception is eye exam, in which the reference category is “not done”. Making “done” the reference category would make this more consistant.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests.