Reviewer's report

Title: Factors associated with initiation of antihyperglycaemic medication in UK patients with newly diagnosed type 2 diabetes

Version: 2 Date: 14 January 2012

Reviewer: Mark Peyrot

Reviewer's report:

Major Compulsory Revisions: None. The authors have done an excellent job of revising and have eliminated all major concerns.

Minor Essential Revisions:

1. Page 9, first paragraph: Insert a new second sentence after the sentence reporting the initiation of medication at three time points. This sentence should say what % of patients with baseline HbA1c over 7.5% initiated medication at the same three time points. This is the key statistic (as opposed to the % of all patients initiating medication), because it indicates how many who need medication have received it. Metaphorically speaking, the 51% figure is like quoting the % of the national population who are on diabetes medication; interesting but not helpful. What we want is the % of those who need medication who are getting it. Ideally, this data (at least the % needing medication who have received it at 2 years) would be incorporated into the abstract.

2. Page 9, last paragraph, second sentence: Delete the word "positively" and insert the word "shorter" so that it reads "...was associated with shorter time to treatment..."

3. Page 10, first paragraph: Replace "faster" in all three places with "shorter"; this will provide a consistent description of the relationship across all mentions in Results.

4. Table 1: Move data from note into table; specifically, in the row below mean HbA1c, give % of respondents with missing HbA1c.

Discretionary Revisions:

5. The value of the paper would be increased if the authors could add a description of Figure 2 in the Results indicating what % of their cohort fell into the following four mutually exclusive and exhaustive categories (summing to 100%), shown here in no particular order: (a) Last A1c above 7.5%, no medication; (b) Last A1c above 7.5%, on medication; (c) Last A1c below 7.5%, no medication; (d) Last A1c below above 7.5%, on medication. These would comprise: (a) Untreated, in need of medication; (b) Inadequately treated; (c) Untreated, medication not needed; (d) Adequately treated. The authors might want to use these figure to discuss the treatment implications of their findings (regarding level of need for medication initiation, and for medication intensification).
**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

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

**Declaration of competing interests:**

I have done consulting and had grants from several manufacturers of diabetes medications and/or devices. It could be implied that this would constitute a bias, but it certainly is not for a particular type of medication or device, let alone a specific brand.