Author's response to reviews

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

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Author's response to reviews: see over
January 28, 2012

Timothy Shipley, PhD
In-house Editor
BMC Endocrine Disorder

Dear Dr. Shipley:

On behalf of my co-authors, I am submitting a second revision of our manuscript entitled "Factors associated with initiation of antihyperglycaemic medication in UK patients with newly diagnosed type 2 diabetes" to be considered for publication. We appreciate the efforts of the reviewers. We feel that we have fully addressed these and the previous comments by performing new analyses and revising the manuscript accordingly.

We look forward to your final decision on this manuscript.

Sincerely,

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Reviewer 1:

No additional comments made by reviewer.

Reviewer 2:

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.

Authors' response: We included these new findings in the Results section (p. 9) and in the abstract (p. 3)

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..."

Authors' response: The sentence was revised as suggested (p. 9).

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.

Authors' response: The sentences were revised as suggested (pp. 9-10).

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

Authors' response: The table was revised as suggested (p. 19).

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).

Authors' response: We appreciate the reviewers' comment and updated Figure 2 with the percentages of untreated patients after 2 years stratified by last available HbA1c for the entire
cohort (with HbA1c measurements) in addition to the different age groupings. The interested reader can ascertain the A and C scenarios put forth in the reviewers' comments. We provide a comment in the Discussion (p. 11) to quantify undertreatment in potentially eligible patients. We feel that addressing findings of treated patients is beyond the scope of this analysis for many reasons including different duration of treatment among treated patients, discontinuation of treatment or non-compliance with treatment, and treatment with multiple antihyperglycemic medications. Further, the timing of HbA1c measurement in relation to treatment initiation may not allow for sufficient time to receive the full effect of the treatment(s). Although we feel that the issues in this comment are important to understand the overall management of patients with type 2 diabetes, this would be better addressed in a completely separate analysis.