Reviewer's report

Title: The Use of Clinical Guidelines Highlights Ongoing Educational Gaps in Physicians' Knowledge and Decision Making Related to Diabetes

Version: 3  Date: 17 July 2014

Reviewer: Sharon Hewner

Reviewer's report:

This paper reports on the results of a survey sent to new practicing physicians regarding knowledge of diabetes care and the use of diabetes guidelines. This is an important topic given the increasing prevalence of diabetes and the evidence that guideline adherence can improve long term health outcomes for persons with diabetes.

Overall all the paper is well written and the title and abstract are appropriate to the content. The authors acknowledge their own previous work and current related work in the field. The question is well defined.

Methodologically there are some weaknesses. The sampling strategy relied on subscribers to a guideline service which may have created some bias. The response rate is not reported in the methods section and on page 6 it is difficult to discern if only fully completed survey were used and if all the respondents cared for diabetes patients in their practice. There was no discussion of the inclusion of endocrinologists as well as primary care physicians in the sample, but this may impact the results.

Many survey responses were converted from ordinal variables into dichotomous variables. This is a concern in the size of practice question and the three frequency of diabetes care questions which were converted to a high low category. It seems that these details would be very important to understand the results. Furthermore, the familiarity with guidelines went from a 5-point to a 2-point scale, but especially in the NGU group the responses were very different.

The discussion and conclusion are balanced and supported by the data, but seem to ignore some key concepts such as team care approaches in redesigned practices where care of diabetes cases is often managed by nurse practitioners and physician assistants who use the guidelines to direct care and incorporation of new roles such as practice facilitators or medical assistants to address guideline issues. What was most striking to me was the low level of knowledge among both GU and NGU groups. Clearly use of the guideline still leaves knowledge gaps about very basic care.

Level of interest: An article of limited interest

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.