Reviewer's report

Title: Implementing a guideline for the treatment of type 2 diabetics: results of a Cluster- Randomized Controlled Trial (C-RCT) among general practitioners (GPs) of Lazio region, Italy

Version: 1 Date: 29 September 2006

Reviewer: Shlomo Vinker

Reviewer's report:

The study deals with two major issues. First is Diabetes Mellitus, a very common chronic disease with many preventable complications. And second the problem of too many guidelines and scarce evidence of effective ways of implementation.

This study is very important and seem to be well designed. The intervention, the study population and the data collected can be generalized to most of the Western World primary care and therefore worth publication.

- Major Compulsory Revisions (which the author must respond to before a decision on publication can be reached)
  1. Background section: Short and well written.
  2. Methods section: the autors use the term "non-complicated type 2 diabetes" to describe the patients in their study. Yet, they do not give a definition to this term and do not say how they ascertained that the included patients follow this definition.
  3. Methods: One possible source of bias is the fact that two physicians that had been allocated to different arms of the study are working actually in the same clinic or even share the treatment of the same patients. You should clarify the system in your country. Are all the family physicians work in solo-practices in your country? How did you cope with the possible interactions between the physicians allocated to different study arms?
  4. Methods: Please clarify how the physicians in the "electronically-linked disease surveillance network" are representative of the family physicians in your district.
  5. Methods: The sentence "We decided to give priority to cheaper and more feasible interventions compared to potentially more effective, but more expensive and complex, interventions." is irrelevant and should be omitted.
  6. Methods: Please clarify if you meant in the sentence "requests for tests, for outpatient appointment visits and drug prescriptions in the follow-up year." actual performance of the test or appointment or just the fact that the physician asked the patient to do it?
  7. Methods: Main outcome – please consider feasability of useing the change between the performance rates of each physican a year prior the intervention and in the year following the intervention to measure the effect of the intervention. If you do not have this data you can leave it as is and add a comment on the issue in the discussion.
  8. Results: Table 1: you should analyse if there are differences in the baseline charcteristics of the physicians in the different arms (eg. Age, workload etc.)
  9. Results: Table 2: same comment as for table 1.
  10. Results: Tables 1& 2: If you will find differences as mentioned above, there maybe some confounders that should be entered to the statistical model.
  11. Discussion: I offer to write the limitations of the study under a special sub heading.

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

'I declare that I have no competing interests'