Reviewer's report

**Title:** An explanatory randomised controlled trial of a nurse-led, consultation-based intervention to support patients with adherence to medication taking for type 2 diabetes

**Version:** 2 **Date:** 12 March 2012

**Reviewer:** Guy Rutten

**Reviewer's report:**

The authors have answered all (except one!) my remarks and questions very well and I hope they agree with me the paper has improved.

One issue remains. As the authors state most adherence measures are self report and often associated with larger effects than objective measurement. The objective measurement of medication adherence is one of the strong features of the current study. Taken this measurement as the gold standard the findings from the MARS are really strange. Could a similar RCT with the MARS as primary outcome conclude that the nurse-led, consultation-based intervention is not effective?

Is their study the definite unmasking of the MARS? I would be pleased if the authors could spend some more lines to this issue than the explanation they now give.

**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 no competing interests with regard to this paper.

Guy Rutten