

## Reviewer's report

**Title:** A cluster randomised controlled trial of a Diabetes REcall And Management system: the DREAM Trial [ISRCTN 32042030].

**Version:** 1 **Date:** 20 July 2006

**Reviewer:** Patrick O'Connor

### Reviewer's report:

This manuscript addresses an issue of great clinical and policy importance, namely, the impact of more sophisticated use of electronic registries on quality of care for diabetes patients. The manuscript is well-written and contributes new information. I have several specific comments on the manuscript:

1. The analysis uses cross sectional values for A1c, BP, LDL, etc. For some of these variables, it may be interesting to see if the predictors were related, not only to values cross-sectionally, but to change in these values over time. The authors may consider such analysis, and could either note why they decided not to do such analysis, or else mention whether the results confirm or disconfirm some of the stated findings of the study.
2. On page 5, the ICC values are quite large. This may be worth noting in a comment, because the size of these ICCs explains why some apparently quite sizeable differences in care are not statistically significant. This is an issue that many readers will not be familiar with.
3. On the 4th line on page 6, there is "an effect size of approximately 0.25 in such measures." Please put a unit on this number 0.25,
4. The validity of the cost data relies on the accuracy of patient reporting of care use. Please discuss this more as a serious limitation. Please provide some references that assess the accuracy of such self-reported utilization information, from other studies.
5. The narrative description of the intervention (page 8) needs to be clearer and more informative.
6. On page 12, second paragraph, there is a statement that "this (lipid) effect may be due to the increased delivery of dietary advice..." This actually seems quite unlikely in light of the fact that lipid drug use increased substantially (although not quite statistically significantly) in the intervention practices. I would delete this sentence, and suggest instead that lipid-lowering drug therapy is the core of lipid management in diabetes patients—to reinforce the importance of such care by physicians.
7. The sentence towards the bottom of page 12 that states "This is particularly important when, as in this case,..." Has words like "secondary care" and "responsibly for expenditure incurred in primary care" that are quite opaque to me, a reader in the U.S. I would drop the lingo and put in more descriptive wording.
8. There are few references to prior diabetes research. These should be augmented. The publications of Steve Shortell, Victor Montori, Patrick O'Connor, and James Meigs come to mind. This is of course, subject to journal limits on number of refs, etc.

**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:** Yes, and I have assessed the statistics in my report.