Reviewer’s report

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

Version: 1 Date: 8 June 2006

Reviewer: Susan Smith

Reviewer’s report:

General
This is an important study evaluating the implementation of a diabetes recall and management system based in a specific region in the UK.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

Major revisions:
1. Introduction: I was surprised that the introduction focuses the review by Shojania et al as this was published after the DREAM trial started. The introduction to the original protocol more clearly explains why the authors chose this approach in the context of when the study started. I would have thought it more appropriate to present the comments relating this study to the review in the discussion section. Otherwise one would have to ask why the authors chose this intervention when the review found that the categories of intervention of provider reminders and audit and feedback were not particularly effective.
2. Data collection: I would be concerned that the different time frames for collecting data pre and post intervention would bias results particularly as it gives more time for process measures of care to be carried out in the intervention period.
3. The intervention: needs to be described more clearly how does it work at patient level does a GP have to go on to the register to be prompted or does it occur automatically once a patient is seen for any reason? The authors also suggest that the system was not fully operational for the whole time of the intervention period need more detail. This relates to a need for the authors to consider treatment fidelity the results of the interviews with practice-based informants are not presented.
4. I was surprised at the high proportion of people on diet alone and the low proportion on insulin this should be addressed in the discussion as it may reflect a bias in the register. Also proportions on aspirin seem very small.
5. Discussion:
6. I am aware of a publication relating to an adjacent region regarding district wide diabetes care. (1) Though this was not a randomized controlled trial, I would have thought it would have been referred to, particularly as the process measures of care are better than in the intervention group in this study why might this be the case?
7. Overall, I felt the discussion was weak and that the results of this study should be place more in context with other international studies and the limitations such as the low response rate should be addressed more comprehensively. There also needs to be discussion relating to the patient based outcomes.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

1. Why did one of the PCTs withdraw?
2. Study patients: How does the register deal with defaulters from care?
3. Is there any idea of how many attend specialist services as well as GPs. The authors refer to shared care, but make no further mention of it so I presume there isn’t a formal shared care arrangement with the specialty services?
4. Which version of the DCS questionnaire was used?
5. In the analysis section the authors state that this paper will be reporting results based on this model are they also planning to report results in a different way elsewhere?
6. The participant flow sheet should include a record of numbers of participants per cluster as well as cluster numbers (2)
7. Deviations from the protocol should also be addressed.
8. The economic analysis is important but is limited by an inability to link costs with outcomes I would have thought that would have been possible given that the authors claim that the intervention in effective in
some areas. However, it is important that they give the figures and the discussion addresses the limitations of the economic analysis.

9. The authors refer to a significant lowering of mean cholesterol – this should state a significant difference between control and intervention groups. Also, lower cholesterol levels are more likely to relate to statin prescribing than just dietary advice in this population – this could be discussed.


Discretionary Revisions (which the author can choose to ignore)

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, but I do not feel adequately qualified to assess the statistics.