Reviewer's report

Title: Private costs and uptake of screening for abdominal aortic aneurysm in a remote rural area

Version: Date: 31 October 2005

Reviewer: Jes Lindholt

Reviewer's report:

General

The paper considers a relevant topic, especially in the UK where comments are concerning whether the acceptable outcomes in the MASS trial can be generalised to the whole of UK. The paper reports a high uptake throughout the area with limited costs and time consumption of the attenders. However efforts were taken to achieve this by having 50 screening locations with consequently less than 200 attenders per location in average. Consequently, the direct costs must be higher than usual, and this ought to be addressed in the paper. Data, analyses, and findings could be more interesting by limited extra efforts. The choice for non-parametric statistical tests could be reasonable, but removes the opportunity to perform more informative multivariate analyses.

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

1. A serious lack is the missing data concerning non-attenders, which seriously reduces the potential of interesting findings. For instance, the authors must have their age and home addresses and could estimate the travel distance and settlement category, if the took the time for it. The consequence is that the paper adds very limited news.
2. This in combination with the choice of non-parametric statistics makes interesting multivariate analysis impossible. For instance, the mixed recruitment strategy offers an opportunity to analyses whether GP based screening produces better uptakes than hospital based screening if travel distance, settlement area and age is similar.
3. Some results are earlier published in the BJS but completely omission of these results from the present paper makes it much less interesting. Most readers would probably like to hear the prevalence of positive findings, but more seriously is the lack of reporting the direct costs. The present paper clearly shows that acceptable uptake is possible in the most remote areas in the UK if care is taken, but fails to report the direct costs of screening, which actually is the most interesting point to discuss. The authors are limiting this topic to the last sentence on page 12: “One might question which benefit is most appropriate, that to the individual being screened or that to health service through reduced costs”. This is very, very wrong, and indicates that the authors have not considered cost effectiveness of their screening programmes, and in addition ignores, the cost effectiveness in the MASS trial is being at the margin of being acceptable, and their sensitivity analysis showed the importance of direct screening costs. Information about how small AAA are followed are needed and the direct and indirect economical consequences of this strategy must also be discussed.
4. Finally, it can not be concluded that the impact of the programme were reduced travel distance and costs, because the study was not designed for detecting reductions and made no analyses to support this conclusion. Actually, the statistical analyses showed that uptake, travel time, and travel distance differed between settlement types (but the differences were small).
Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Discretionary Revisions (which the author can choose to ignore)
Introduction: Would benefit of a substantial reduction
Results: I do not understand these chi square values when testing continuous variables with the kruskal wallis test?
Discussion, page 10. line 3-4. It must be Viborg in Denmark – not Aarhus, and the attendance rate must also be wrong (I guess “5” should have been a “%”)
Discussion: A discussion about the largest indirect costs and its acceptability could be interesting.
Tables: Range could be informative.

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

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:
I declare that I have no competing interests