Reviewer's report

Title: A pre-post study testing a lung cancer screening decision aid in primary care

Version: 0 Date: 04 Aug 2017

Reviewer: Jenny Hewison

Reviewer's report:

This is a small piece of work, carefully described, on an extensively studied question in screening research. The paper's main merit is that it demonstrates the lack of strong and consistent relationships between measures of understanding and of preferences, and screening behaviour, even in a small and essentially self-selected sample. This lack of connectedness is not a new finding in screening research, but it is a reminder that some of the simpler assumptions about preventive health behaviour need to be challenged, because of their practical implications. That said, small and uncontrolled studies are easily criticised and the authors have not done enough to clarify which of their findings may be artefactual, in the sense that generalisation beyond the research context would be risky, and which add to the body of work which has wider applicability. The main threat to the latter comes not just from the low final numbers of participants in this study, but also from the low recruitment rate, the implications of which are not commented upon by the authors. It is very unlikely that the final sample was representative of the population of the interest. There was, for example, a financial incentive to take part in the study, which in a disadvantaged population may have led to some participants focusing less on the contents of the information session and more on the reward for attending. For other people, the extra study visit may have acted as a deterrent. Many other factors will undoubtedly have been in play.

I would also have expected more commentary on the validity of the measures used. The perceived benefits and harms that influence behaviour embrace far more than the content areas covered here.

This paper has little to add to our understanding of screening behaviour. The results could offer a useful warning to service providers not to make assumptions about the impact of certain forms of information provision, but the design and size limitations of the study will unfortunately limit its influence in that respect.
Are the methods appropriate and well described?  
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?  
If not, please specify which controls are required in your comments to the authors.

No

Are the conclusions drawn adequately supported by the data shown?  
If not, please explain in your comments to the authors.

No

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I am able to assess the statistics

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