Reviewer’s report

Title: CanPrevent: A telephone-delivered intervention to reduce multiple behavioural risk factors for colorectal cancer.

Version: 1 Date: 17 May 2012

Reviewer: Annie Anderson

Reviewer’s report:

This paper presents an excellent background to the work reported making a strong case for exploring the promotion of multiple health behaviour change in people who have one or more first degree relative with colorectal cancer. The intervention being tested is also reasonably well described and the practical grounds for undertaking telephone based interventions set out (although no mention is made of increasing mobile telephone use and the limits this may create for a one hour counselling session).

I think there are a number of problems with the paper in its current form

Recruitment and response
• Response rate is very small considering the incidence of the disease diagnosed each year (even 61 is small).
• It is unclear why the first 28 were approached.
• It is unclear what the number 28 was based on …why not screen all 61 if all responded within the study period to provide some mixture e.g. gender balance/or other demographic ranges
• It is unclear what the recruitment study period was… e.g. 61 people expressing interest in one week sounds promising for planning a trial, 61 in a 12month period does not

Assessment methods
• All results are self-reported and whilst reported as being derived from valid and reliable measures are they all tested in this age group and tested for longitudinal validity? In cross sectional analysis there is less need to worry about social bias in reporting, but when an intervention has taken place, social bias in follow up may well be increased.
• There is much in the literature about under reporting body weight (and indeed over reporting height in the elderly) which makes attaining valid BMI measures challenging.
• Waist circumference is known to vary considerably through measurement error in finding the correct part of the body to measure and repeating it in the same place some weeks later. There is no mention of specific instruction being provided to participants e.g. photographic instructions etc.
Intervention
This section is the most interesting part of the paper and merits further detail on development, delivery and formative or related research.

Follow up
Why were the follow up measures done at 6 weeks? This is a very short period and there is no evidence that changes that are reported at 6 weeks are continued over a longer period… they indicate initiation of change but neither short nor long term maintenance. In a feasibility study it would not necessarily be appropriate to undertake long term follow up (that may be for full RCT) but undertaking short term follow up after the intervention has ended would be useful e.g if the intervention runs for 6 weeks what happens at the end of 6 weeks and after intervention withdrawal at the end of 12 weeks?

The short follow period with no control group) does not take account of seasonal effects. Indeed mention of dates of collection might be useful. For example, if this study was undertaken immediately post Christmas (say January 1st to February 14th) could the results be repeated any other time of year? The lack of control group does not help make the case for absence of secular change so this issue needs discussion.

Personally, I dislike findings being described as non significant improvements. If they were non significant then there were no improvements. Indeed, the discussion would benefit from some comments on the meaning of significance testing in under powered studies.

I was disappointed to see very little qualitative reporting. One of the best things about small scale feasibility studies is the insight gained from qualitative feedback… if there is more to report this would also enhance the manuscript

Feasibility perspectives
If this is a feasibility study to inform a future RCT then the reporting could usefully take a systematic report to

Response rate
Early retention
Reported Adherence
Acceptability

Estimated numbers needed for a fully powered trial (clearly stating the primary outcome and statistical calculation).
See for example Anderson AS et al Live well