Reviewer's report

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

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Reviewer: Miriam Morey

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Regarding Manuscript: CanPrevent: A telephone-delivered intervention to reduce multiple behavioral risk factors for colorectal cancer.

Major compulsory revisions.

1. General comments: This is a very well written manuscript describing the effects of a feasibility study to reduce colorectal cancer risk factors among first degree relatives of colorectal cancer survivors. A strength of the study is the innovative target population. While well written, the major concern with this study is that the study is written with the tone of a full-blown clinical trial but lacks the rigor of a full-blown clinical trial and thus the results are virtually without meaning. Remediation of this will require a substantial revision and redirection of the tone of the manuscript. The title should reflect that this is a pilot or feasibility study so as not to mislead the readership. Given the lack of information on power estimates for outcomes, a priori stated outcomes (what is the primary outcome?), and lack of control for baseline values on the statistical models, the authors should present the data either as pre and post scores or effect sizes without showing any statistics or tests of significance as these are virtually meaningless as presented; without controlling for baseline (not to mention multiple tests). There is a nice breadth of measures and these, along with the results of this study, might inform a future appropriately designed clinical trial. But the results of this study should be scaled back considerably given these not insignificant limitations. The investigative team should consult a biostatistician for advice on how the analyses should be conducted and results reported.

2. Abstract. Results will need to be completely rewritten. Eliminate all t-test from the results. I believe if you control for baseline value of each outcome, none of your tests will be significant. Conclusions may need to be scaled back.

3. Methods, Data Collection. Were interviewers different from the interventionists?

4. Data Collection, Measures. Since this is a feasibility trial, there should be some statement that investigators collected a series of measures to determine effect sizes for a future trial (if that is the case) or make some statement about why the measures were selected, which ones were of primary interest. This is just a listing of measures with no rationale or prioritization.
5. Were height and weight by self-report? What instructions were given to individuals for self-assessment of BMI?

6. Intervention. How much training did your health coaches have in motivational interviewing? Expand on the training the health coaches received. What was their background?

7. Statistical analyses. Please consult with biostatistician. Since this is a feasibility study you should not be held to the rigor of a clinical trial. However, you should simply present the raw data with no statistical analyses performed. Alternatively, you can show effect sizes if desired. See general comments above.

8. Results, paragraph 1. Please clarify what is meant by reaching the required sample size for a small feasibility trial.

9. Results. These sections will need revision if results are presented differently.

10. Discussion. Consider the clinical versus statistical significance of some of the change scores. For example, a change of 2.2 points on the PF scale of the SF-36 is not clinically meaningful. It is within a statistical margin of error; which is why I have suggested you consult a statistician. I think it is important to appropriately temper your enthusiasm for the study results. You have indeed done a fabulous feasibility study. But you need to be very cautious in interpreting the results of your study and comparing these with findings of other well-designed studies.

Discretionary Revisions

1. Introduction, paragraph seven. Should clarify that telephone-delivered interventions have been shown to be acceptable for short-term interventions. Their long-term effectiveness or sustainability is not as good in comparison to mailed materials or multi-modal interventions (using telephone and mailed or multiple modes of intervention delivery). The citation provided is also based on a very short-term intervention. This perhaps should be mentioned in the discussion.

2. CRC screening. The questions about perceived risk of CRC are interesting. Perhaps, given the nature of the intervention developed for this study, future studies can include a question that asks “What proportion of people in the general population are diagnosed with CRC due to lifestyle (diet, physical activity, smoking)?”

Minor issues not for publication: Please consider another word for “trailing”. Not sure if that is a word. Clinical “trial” is a noun or adjective. I have never seen trial used as a verb. Same with “manualised” (in the methods Ethics Review paragraph. Not sure if that is a word. My apology if this is an issue of differences in language across countries.

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

Statistical review: No, the manuscript does not need to be seen by a statistician.

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