Reviewer's report

Title: Evaluating the Exposure to a Rural Community-based Colon Cancer Prevention Intervention

Version: 2 Date: 20 May 2009

Reviewer: Eva Pagano

Reviewer's report:

The study by Linda Zittleman and colleagues describes the implementation of a rural community-based colon cancer screening program and the effect exposure to the intervention had on screening intention in the population. The covered topic is of interest and the detailed programme description is of potential utility for readers, even if targeted to a specific rural area. The posed objectives are well matched by the study design.

Some uncertainty regards methods and results presentation.

Authors should clarify the following aspects in order to assess the soundness of results:

1. The study has been funded by the CDC. Were the testing cost covered by the project? Was this aspect mentioned in the intervention messages and materials? The healthcare expenditure coverage of the community is likely to affect the propensity to undergo preventive care. This aspect needs to be discussed.

2. Methods do not describe the study dimension. From Results we know that the response rate was 45% (i.e. a total sample of around 1020 subjects). Since the response rate is not high, a description of non-responders should be added in a table with at least the demographics characteristics (age, gender, race). If these data are not available, as seems from the Limitations paragraph, some clarification should be added. Still, bias on results from the non-responding should be highlighted to readers in the discussion.

3. Results of the two multivariate models (coefficient and confidence intervals) are required to better understand associations and models fitting. Figure are useful to communicate the overall results but are not enough explicative. For instance, the terms of interaction seems to behave differently in the two models. A table should be added.

4. Gender affected exposure to the intervention. Also, some data on the gender effect on previous screening and responses would be of interest. Results could be assessed by stratifying for gender.

Minor Essential Revisions
In Figure 2 the y line label: Responses for Response

Discretionary Revisions
In the Background session, reference to “the community-based participatory research (CBPR) methods” is not clear. The entire paragraph is hard to follow due to the several institutional definitions.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests