Reviewer’s report

**Title:** Screening Mammography Beliefs and Recommendations: A Web-based Survey of Primary Care Physicians

**Version:** 1  **Date:** 4 April 2011

**Reviewer:** Paul L Reiter

**Reviewer’s report:**

This manuscript examines primary care physicians’ beliefs and recommendations for screening mammography. Given the recent USPSTF statement on mammography use for younger women (less than 50 years of age) and older women (more than 74 years of age), this is an important public health issue. While some interesting data are presented, I have some concerns about this paper.

**Major Compulsory Revisions**

1. Data were collected from June – December 2009, and the USPSTF statement was published in November 2009. Thus, most of the data were likely collected prior to this important statement being published, meaning this paper mostly provides a pre-statement snapshot of physicians’ beliefs (which have been examined previously and are much less interesting than post-statement beliefs). Did the survey attempt to capture the effect of this statement being released mid-study? Also, are there any comparisons that can be made between pre- and post-statements surveys?

2. As noted, the response rate is low (5.7%). Given this, is the sample nationally representative, as stated on p.5? While I agree that this is a national samples (physicians from all over the US participating), there would need to be comparisons made (specialty type, age, etc.) between respondents and non-respondents to establish that the sample is nationally representative. Are these comparisons available?

3. The analyses are confusing in some areas. For example, both the abstract and results section (p. 10) provide p-values comparing OBGs to IMs and FPs, yet only one p-value is provided. Were IMs and FPs combined for these analyses? If not, providing 2 p-values for each outcome may be more helpful for readers (OBGs vs. IMs and OBGs vs. FPs).

4. The text states that ordinal logistic regression was performed (p.8) but Table 3 states that multinomial logistic regression was done. These are very different analytic methods whose results need to be interpreted very differently. Please clarify what methodology was used.

5. The discussion section needs to better relate this study’s findings to the existing literature on physicians and mammography recommendations. For
example, a recent study was published by Meissner et al. in Cancer that may be particularly relevant. Also, given the timing of data collection, the authors should better clarify the potential contribution of this paper.

Minor Essential Revisions

ABSTRACT
6. Can the word “predictor” be used given the cross-sectional nature of the data? Also, the results portion of the abstract seems to repeat the same data twice. This may just be an error that occurred during manuscript submission though.

BACKGROUND
7. The various recommendations should be better described. For example, ACS recommendations are annual mammograms for women ages 40+, while ACOG recommends annual screening for women ages 50+ and every 1-2 years for those ages 40-49. Providing these additional details would be useful for readers.

METHODS
8. How were responses of “not sure” and “not familiar with this guideline” coded for their respective items and handled in analyses? Were participants who provided these responses excluded from analyses involving these items?
9. How many individuals participated in pilot testing and what type of physicians were they?
10. How long after the first round of surveys were the second and third rounds sent out?
11. In describing the data analyses, the scale for recommendations is described as “always”, “rarely”, and “sometimes”, yet the survey methodology section lists options of “always”, “often”, “rarely”, and “never”. Please clarify. Also, how were participants who responded “never” handled in analyses (currently not described in data analysis)?
12. Why were early responders compared to late responders? Is there reason to think the two groups would differ? A more common approach would be to compare respondents to non-respondents, as described above.

RESULTS
13. It says 11,922 physicians were invited to participate. Why were 78 not invited (given that 12,000 were sampled)? I apologize if this was described and I missed it.
14. States that age, number of years in practice, and percent female patients (which is not included in Table 1) did not differ by specialty. Did the other variables (e.g., race) differ?
15. p. 10: States that “data not shown”. Why are these data not provided if differences do exist?
16. For physicians' recommendations, the data described in the text do not appear to match what is presented in Figure 2 (assuming Figure 2 shows % who always recommends, this is not described in the figure).

17. The vignettes mentioned in the results should be better described in the methods. For example, it would be helpful to describe the comorbidities examined in the methods section so readers know this prior to the results section.

TABLES

18. Table 2: It would be useful to provide information on all the comparisons (i.e., do FPs differ from OBGs, etc.), not just the overall p-value.

19. Table 3: Do OBGs differ from IMs for recommendations for 40-49 year olds? Currently, this comparison is not made but the provided data suggests that it does. This would be important to show.

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

Quality of written English: Needs some language corrections before being published

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.