Author's response to reviews

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

Authors:

Shagufta Yasmeen (shagufta.yasmeen@ucdmc.ucdavis.edu)
Patrick S Romano (psromano@ucdavis.edu)
Daniel J Tancredi (djtancredi@ucdavis.edu)
Naomi H Saito (nhsaito@ucdavis.edu)
Julie Rainwater (julie.rainwater@ucdmc.ucdavis.edu)
Richard L Kravitz (rlkravitz@ucdavis.edu)

Version: 4 Date: 19 November 2011

Author's response to reviews: see over
Reviewer's report

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

Version: 3 Date: 12 September 2011

Reviewer: Mariona Pons-Vigués

Reviewer's report:

Minor essential revisions:

This paper aims to explore primary health physicians' beliefs and recommendations for screening mammography for average risk women in various age categories, the influence of USPSTF guidelines on their clinical practice and their hypothetical decisions for mammography in specific clinical scenarios.

My new comments are below:

(1) - It is necessary to describe the statistical analysis in the abstract:

Response
Please see the revised abstract, and including the statistical analysis (page # 1; line # 10-14)

(2) - Objective: It is recommended to specify the setting and the year of the study

Response
Please see the revised objective: (page # 5; line # 6-10)

The objectives of this study were to explore (1) US primary care physicians’ beliefs about the effectiveness of screening mammography in 2009; (2) their decisions regarding screening mammography in hypothetical clinical case scenarios; and (3) predictors of effectiveness and recommendations for screening mammography in different age categories.

(3) - Methods section

It should include the global number of the study population (approximately)

Why the sample size is 11,922 people? How did you calculate the size?

Which are the results of the validation? Please, cite a document where we can consult this information
Response

It should include the **global number of the study population** (approximately)

Please see (page # 7; line # 11-15) explaining the global number of the study population.

We asked the AMA to provide overall counts of physicians, with and without those with email addresses, for 3 primary care specialties in the 4 US regions. A total of 261721 were identified in the database and email addresses were available for (44.7%) 119747; (40.3%) 48378 family physicians, (43.6%) 52199 general internists, and (16%) 19170 obstetricians/gynecologists.

Why the **sample size is 11,922 people**? How did you calculate the size?

Please see (page # 7; line # 15-25) and (page # 8; line # 1-3)

Survey methodology

The sampling frame was stratified by physician specialty (IM, FP and OBG) and years in practice (1-9, 10-20 and >20). Systematic random sampling was performed after sorting the sampling frame by U.S. Census region (Northeast, Midwest, South, and West) to ensure adequate representation of primary care physicians in each Census region (Northeast, Midwest, South, and West). OBG and the US regions where <= 30% physicians were accessible by email were oversampled at a rate of approximately 2.5 to achieve appropriate representation of physicians by specialty (IM, FP and OBG) in all regions. The probability of selection for physicians in each specialty was proportional to the specialty’s representation in the U.S. physician population. Population counts and sample specifications were provided to the AMA. Sample variables requested from the AMA are displayed in (Table 1). Anticipating a 10% response rate we estimated that a total of 11,922 would be sufficient to provide 80% power to find a 10% difference between physician specialties including family physicians, general internal medicine and obstetrics and gynecology.
Which are the results of the validation? Please, cite a document where we can consult this information

**Response**

We did not perform any validation. We pilot tested the questionnaire in two separate settings that included primary care physician participants in a research seminar and a web based questionnaire to primary care colleagues in academic settings. This was done to get feedback from colleagues about the clarity of questions in the survey to improve clarity before the final questionnaire was emailed to the AMA.

(4) Explain the handling of missing values. All of the 684 participants respond to all the questions/items?

**Response**

Please see [page # 9; line # 5-6]

The rates for missing values were less than 5% for item specific response and were excluded from the analysis.

(5) Results: There are differences between responders and non-responders?

**Response**

Please see [page # 12; line # 12-23]

Result section

There were no differences in demographic and practice characteristics of physicians who responded to the first and second Med E-Mail Broadcast. Physicians who responded to third Med E-Mail Broadcast (third-wave respondents) compared to earlier respondents showed significant differences by demographic and practice characteristics.

“Early respondents (first and second wave) compared to third-wave respondents were more likely to be females (58% versus 44%, p= <0.001), 25-54 years of age compared to >=55 years (84%
versus 69%), OBG compared to FP (OBG 34% vs 23%, FP 32% versus 41%), those reporting higher percent of new females patients seen per week (27% versus 26%) and physicians who were $\leq 9$ years in practice (48% versus 38%) $p=0.001$. However, there were no differences in responses between early compared to late respondents in physician’s perceived belief in mammography effectiveness in reducing breast cancer mortality, responses to guideline influence, and recommendations for screening for women in different age categories.

(6) -Discussion

Please, discuss more in deep the low response rate and the size of the sample

Response

It should discuss more in deep how the revised the USPSTF guidelines affected the results of the study.

Level of interest: An article of limited interest

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