

PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Mammograms on-the-go: predictors of repeat visits to mobile mammography vans in St. Louis, Missouri, USA – A case-control study
AUTHORS	Drake, Bettina; Abadin, Salmafatima; Lyons, Sarah; Chang, Su-Hsin; Steward, Lauren; Kraenzle, Susan; Goodman, Melody

VERSION 1 - REVIEW

REVIEWER	Mark Dignan University of Kentucky, Lexington, KY, USA
REVIEW RETURNED	03-Dec-2014

GENERAL COMMENTS	<p>Abstract (1)awkward phrase -- cancerous cause of death – consider cause of cancer death or something similar (2) the phrase ‘determine if ‘ should be something like ‘determine the extent to which’</p> <p>Introduction (1) the phrase ‘many cities’ is potentially misleading – mobile mammography has been used in rural areas as well – not run by cities but usually by health care systems or hospitals (2) end of intro – would be helpful to restate the purpose of the project – this would help to clarify language in the abstract and intro that describe the project in slightly different ways – is the main focus of the project on repeat use of the mobile system or more broadly on describing the patients?</p> <p>Methods – first paragraph needs to be reviewed to correct verb tense - should be past tense to be consistent with the concept that this is a report of past events</p> <p>Statistical analysis (1) the phrase ‘discrete and dichotomous outcomes’ is unclear – please expand the description (2) The sentence ‘Missing data was minimal’ is unclear and is more useful in the results section – the sentence should include the amount of data that were missing.</p> <p>Results – (1) The results section should be reviewed to ensure that all verbs are used correctly – past tense. The tables provide information regarding the results of statistical testing, so there is no need to repeat information in the text. (2) The large sample size drives many of the statistically significant associations reported; hence, additional effort is needed to interpret the results in terms of clinical significance.</p> <p>Discussion – (1) The sentence ‘The findings demonstrate that the mobile mammography van has had considerable success in reaching vulnerable women who may have otherwise not had a mammogram’ does not seem to follow the project. How can it be claimed that the mobile vane reaches vulnerable women without effort to collect data on mammography from the population?</p> <p>Overall: It is curious that mammogram results are not described in</p>
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	the manuscript. It would be very important to learn whether repeat mammography is associated with results of a previous mammogram. This issue should be described in the manuscript -- if results are not available it should be stated; otherwise, mammogram results should be included in the analyses
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REVIEWER	Sherrie Flynt Wallington, PhD Georgetown University Medical Center United States
REVIEW RETURNED	26-Dec-2014

GENERAL COMMENTS	This is important area of research. Mobile mammography is an important tool in breast cancer prevention and control and the reduction of breast cancer disparities. Overall, the paper will well written but a few areas of improvement would strengthen the manuscript even more. Adding some guiding research questions or hypothesis would help to better frame the paper. In addition, more about the recruitment process and at one point informed consent was obtained would be helpful. Also, much attention has been given to geographical proximity and time and distance to mobile and mammography sites. Integrating something about this even in the discussion as far as future areas to address might be useful particularly in looking at rural populations.
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VERSION 1 – AUTHOR RESPONSE

1. Please add, USA to the end of the title
This change was made. p.1

2. 'This i a cross-sectional analysis' - missing 's'
This sentence was deleted when making other changes to the manuscript. p.6

3. 'Participants are consented' - or 'Patients provided consent'? This is more respectful of the fact that participants volunteer their consent, rather than have their consent somehow taken from them
Thank you for bringing this to our attention. This change was made. p.6

4. Please include the study design in the title
This change was made. p.1

Reviewer 1:
Abstract

1. awkward phrase -- cancerous cause of death – consider cause of cancer death or something similar
Thank you for bringing this to our attention. This change was made. p.2

2. the phrase 'determine if ' should be something like 'determine the extent to which'
Thank you for bringing this to our attention. This change was made. p.2

Introduction

1. the phrase 'many cities' is potentially misleading – mobile mammography has been used in rural areas as well – not run by cities but usually by health care systems or hospitals
This phrase was changed to "In order to improve screening rates, particularly among women who underutilize mammography screening, many areas, rural and urban, have introduced mobile

mammography.” p.4

2. end of intro – would be helpful to restate the purpose of the project – this would help to clarify language in the abstract and intro that describe the project in slightly different ways – is the main focus of the project on repeat use of the mobile system or more broadly on describing the patients? The authors restated the purpose of the project at the end of the Intro. p.5

Methods

1. first paragraph needs to be reviewed to correct verb tense - should be past tense to be consistent with the concept that this is a report of past events

Thank you for bringing this to our attention. This change was made. p.6

Statistical analysis

1. the phrase ‘discrete and dichotomous outcomes’ is unclear – please expand the description We simplified the description to make it more clear. By discrete we meant the number of visits ranged from 1 to 7. p.6

2. The sentence ‘Missing data was minimal’ is unclear and is more useful in the results section – the sentence should include the amount of data that were missing.

We added more detail on missing data. “Missing data was minimal. 8.35% of data were missing for Models 1 and 2. Percent missing for each variable is shown in Table 1.” p.7

Results

1. The results section should be reviewed to ensure that all verbs are used correctly – past tense. The tables provide information regarding the results of statistical testing, so there is no need to repeat information in the text.

We reviewed the text for verb usage. We deleted the p-values from the text for Table 1 results.

2. The large sample size drives many of the statistically significant associations reported; hence, additional effort is needed to interpret the results in terms of clinical significance.

We added a comment to the Discussion to address this issue. “[19] Although our large sample size may drive some of the statistically significant associations reported here, it’s public health relevance to mobile mammography programs is relevant. Our study suggests that women identified as being less likely to have repeat or routine screening in previous studies, are significantly more likely to have repeat visits using mobile mammography.” p.11

Discussion

1. The sentence ‘The findings demonstrate that the mobile mammography van has had considerable success in reaching vulnerable women who may have otherwise not had a mammogram’ does not seem to follow the project. How can it be claimed that the mobile vane reaches vulnerable women without effort to collect data on mammography from the population?

Thank you for bringing this to our attention. We have reworded the sentence as, “The findings demonstrate that the mobile mammography van has had considerable success servicing more than half of its vulnerable patient population on a repeat basis.” p.11

Overall

1. It is curious that mammogram results are not described in the manuscript. It would be very important to learn whether repeat mammography is associated with results of a previous mammogram. This issue should be described in the manuscript -- if results are not available it should be stated; otherwise, mammogram results should be included in the analyses

The authors conducted additional analyses and added this sentence to the results section, “To determine whether women with a repeat mammography were following up an abnormal

mammography result, the investigators conducted the same analyses only among women with a negative mammography result (BI-RAD=1) and the results were similar to what is presented here. These results are not shown.” p.10

Reviewer 2:

1. This is important area of research. Mobile mammography is an important tool in breast cancer prevention and control and the reduction of breast cancer disparities. Overall, the paper will well written but a few areas of improvement would strengthen the manuscript even more. The authors thank the reviewer for this comment.

2. Adding some guiding research questions or hypothesis would help to better frame the paper. In addition, more about the recruitment process and at one point informed consent was obtained would be helpful.

The authors added information to the introduction about the guiding purpose of the study. In addition we added information on the consent process to the Methods section. p.6

3. Also, much attention has been given to geographical proximity and time and distance to mobile and mammography sites. Integrating something about this even in the discussion as far as future areas to address might be useful particularly in looking at rural populations.

Thank you. The authors have information on future research in the Discussion section. p.12

Again, the authors thank you for the time you took to provide comments on our manuscript.

VERSION 2 – REVIEW

REVIEWER	Mark Dignan University of Kentucky, USA
REVIEW RETURNED	16-Jan-2015

GENERAL COMMENTS	Great work addressing the previous comments! However, please consider changing the first sentence of the manuscript, 'In the United States of America, 1 in 8 women develop an invasive form of breast cancer in their lifetime, making it the most common cancer after skin cancer among women.' to something that conveys the concept of risk over a lifetime -- 'On average, an individual woman has a 1-in-8 chance of developing breast cancer over an 80-year lifespan.' (url: http://www.breastcancer.org/symptoms/understand_bc/risk/understanding). A suggested draft of the sentence is.... Over an 80-year lifespan, the risk of developing breast cancer for US women is 1 in 8.
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