Reviewer’s report

Title: Providing guidance for genomics-based cancer treatment decisions: insights from stakeholder engagement for post-prostatectomy radiation therapy

Version: 0 Date: 30 Apr 2017

Reviewer: Sara J. Knight

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MIDM-D-17-00032
Providing guidance for genomics-based cancer treatment decisions: insights from stakeholder engagement for post-prostatectomy radiation therapy

This manuscript discusses a stakeholder engagement study that sought to inform a Markov model that would include individual level information, specifically cancer recurrence risk estimates from genomic tests. Several groups of stakeholders—patients, urologists, radiation oncologists, industry representatives, and informaticians—were recruited for participation in prostate cancer genomics education and stakeholder feedback meetings and individual interviews. Discussions were analyzed to identify thematic domains and specific recommendations offered by stakeholders according to their group (e.g., patient, urologist, etc.). Analysis of discussion data indicated that the majority of suggestions focused on the decision aid, including portability across multiple platforms, interactivity, and availability. The study focuses on an important arena for innovation and emphasizes the potential for stakeholder engagement in the design of risk communication and decision support using genomic information. Several concerns and considerations are discussed in the major comments below.

Major Comments.

1. Methods, page 4, line 36. The rationale for conducting individual interviews with five patients and group meetings with other stakeholders was not clear. The paper indicates that the individual meetings with patients were conducted to preserve patient privacy, to maximize convenience for participants, to stay on topic, and to avoid the risk of unfocused or tangential discussions that can be observed with larger focus groups. Because privacy, scheduling convenience, and unfocused discussion could be a concern in all the groups, patients, health professionals, industry experts, why not conduct individual interviews for all stakeholders? The decision to conduct individual interviews with patients only was especially surprising given the number of published reports of prostate cancer patient focus groups and the value of patient focus group data in previous studies.

In addition, the decision to conduct individual interviews in one stakeholder group and group discussions in all other stakeholder group introduces the potential questions about
the comparability of group and individual data. In the results section, there was no further discussion of the comparability of the individual interview and group discussion data and no method for integrating the data was presented.

2. Although the methods section described the educational component of the stakeholder interaction, the methods section included very little detail on the methods of recruitment of participants and the methods used for facilitating the individual interviews and group discussions. The types of interviewers and facilitators and their training and experience, the use of structured interview and discussion guides, the use of recording and transcription, the length of the interviews, the collection of quantitative data on the importance of topic areas, the use of member checks all are important in the evaluation of the strength of the methods and the interpretation of data.

3. Similar to the previous comment, the section on the analysis of data was so sparse it was not possible to evaluate the interpretation of the data. For example, this section included no information on who conducted the analysis, what method was used to identify themes and content areas, how disagreements between coders or raters was resolved, and how data were summarized or integrated.

4. Results. Additional information on stakeholders is needed to interpret the results, particularly basic demographics for all groups, clinical information for patients, experience in prostate cancer care and genomics for health professionals, and investment of industry professionals in particular genomic tests and decision support systems.

5. Discussion. Several of the results, particularly the lack of concern among stakeholders about privacy, are surprising considering the context of other studies that have identified privacy as an important characteristic considered in decisions to have genetic and genomic tests. There is some evidence that these concerns have persisted despite law and regulations, such as GINA and HIPAA, that were introduced to protect against discrimination based on genomic information. Some discussion is needed as to how and why the present stakeholder findings may contrast with data provided by earlier stakeholder groups.

6. Discussion. In the discussion of study limitations, it would be critical to emphasize the select samples used in this study and the limited generalizability of data from one discussion section per stakeholder group.
Minor Comments.

1. Page 3, line 19. The first sentence of the second paragraph states that "In the current report, we described a stakeholder engagement program." Considering the context being the present paper, this should be revised perhaps as "…we describe a stakeholder engagement program."

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.
No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.
Unable to assess

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.
Unable to assess

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If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.
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