Reviewer’s report

Title: Patients' willingness to share digital health and non-health data for research: A cross-sectional study

Version: 0 Date: 15 Apr 2019

Reviewer: Joanna Sleigh

Reviewer’s report:

General comment:

This research paper explores a very interesting and important topic, that of the relationship between patient perceptions of their respective data-traces with patient preferences and willingness to share data for research. The background requires a bit more detail, references, and explanation, and the writing style made a bit stronger, yet it nonetheless introduces the topicality of the research. The overall structure of the paper works well. The statistical analysis is sound and the tables are clear and easy to follow. The paper is moreover coherent with the larger domain and contributes to our knowledge of patient data sharing preferences. Outlined below are points that should be addressed.

Point 1: Background

Target's predictive algorithm's identification of a teen pregnancy is an often cited case and exemplifying case of the relevance of shopping data to health. However, a bit more detail of the cultural context is needed. Specifically, in which culture did this happen, and who 'criticized' Target's tracking practices? The media? The family involved? Was it critiqued internationally? Please also make stronger the statement that the sensitivity of the information and the process of communication was what was 'unacceptable' and to whom?

Point 2: Background

"Contemporary practices to safeguard the privacy of health related data…" - what 'contemporary practices' are you referring to? National practices, international practices? Guidelines or legislation? Also please reference - 'health data were largely seen as…'

Point 3: Background

"Prior work suggests that many individuals are willing to share substantial personal information… a large genre of science fiction…." More references are needed to support your points in this and the following paragraphs.
Point 4: Background

Since experience of privacy is later noted as one of the core parts of the survey, some more background to the topic of privacy would be helpful. One suggestion is to look at Helen Nissenbaum's work which explores public perceptions of data, its usage and of privacy.

Point 5: Background

The shift between talking about a public perceptions of data usage and then patient perceptions of data usage needs to be made clearer. To signal this distinction, Line 87, you could add something along the lines of "in the context of health care, prior work has found…"

Point 6: Methods

Why was a deception design deemed as the most appropriate? What other methods were considered? Also how did you come to determine the 5 core components of the survey?

Point 7: Methods

19 different types of data. How did you come up with this list of 19 data types?

Point 8: Discussion

Line 221. Please explain how and why transparency could be beneficial for a more patient-centric approach.

Point 9: Discussion

The limitations of this study are outlined sufficiently. However what are directions for further research?

Point 10: Discussion

"Regulations protecting the privacy of health information…" - please provide a reference.

Point 11: Conclusion

The conclusion is very short. Please make more explicit what this research paper contributes to the larger domain.
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

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

Yes

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

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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