Reviewer's report

Title: A Systematic Review of Healthcare Applications for Smartphones

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Reviewer: Michael Maaser

Reviewer's report:

The article summarizes and discusses smartphone applications in the healthcare and medical sector. This summary was achieved by a quite thorough and systematic review/survey of articles potentially regarding the approached question. The articles were searched from the MEDLINE database.

1. Although the initial number is already quite large, I was wondering whether other databases, e.g. ACM digital library, would also have additional matches (DISCRETIONARY).

The authors introduce a sound classification and discuss the found applications within this classification. Besides the third party information they retrieve from the reviewed articles they also back up with experiences of at least one of the authors, which increases the trust in the discussed information.

The article provides a good overview and some insight in the available applications.

2. There is no remark on what application / feature is missing or requested by healthcare professionals or students. (DISCRETIONARY)

3. The conclusion does not really provide an outlook. What should this study help for? Will there be any attempts of standardizing existing applications? Can those applications be integrated in a system or conjointly used? Is it reasonable to have a loose collection of applications for different rather narrow application scopes? (MINOR)

4. I am not familiar with this journals format, but I found it hard to read and get a brief overview of what I read in each paragraph without the referenced figure or table at hand. The tables and figures are moved into the appendix, which does not help the understanding while reading. It would be preferable to have those at the same or next page. Further the figure labels are not with the actual figure, but that might depend on the required submission format. (MINOR)

5. The availability of the reviewed applications on different smartphone OSs is reflected in the tables only, which is ok to remain in the structure of the classification and to keep the sentences in reasonable lengths. On the other hand there is not even an exemplary summary, which set of applications on which platform, a healthcare professional may feasibly and reasonably have, use and need on one device. While reading there were various applications named, that are widely used in practice but no reflection if ever multiple applications were used or required. E.g., some applications exist only on iOS other only on Android. Is there a case where the concurrent usefulness is high enough to have...
multiple devices or better port the applications? (DISCRETIONARY)

6. Page 11 mentions EIGHT articles with focus on overview and uses of ... but has only SEVEN references [11]...[63] (MINOR)

7. Page 20: The description of table 8 mentions a HIT client application. This abbreviation is not introduced. I assume it shall be HIS. (MINOR)

Level of interest: An article of importance in its field

Quality of written English: Acceptable

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.