Reviewer’s report

Title: Designing clinical practice feedback reports: Three steps illustrated in Veterans Health Affairs long term care facilities and programs

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Reviewer: Benjamin Brown

Reviewer's report:

This paper presents a new method for undertaking user-centred design (UCD) for feedback reports. It presents an example of how it used in the Veterans Health Administration.

It is a well-written paper about an important quality improvement topic that doesn't get enough attention.

My first main critique of the paper is that there aren't enough clear examples of how to implement the method. I appreciate that additional file 1 and figures 3 and 4 go some way to doing that, but the detail is hidden and isn't clearly linked to the methods. I would recommend bringing it into the main text, perhaps in a table, with summaries of the findings from how it was done in the VA.

And, I may be mistaken, but there don't seem to be any usability test findings provided from the VA example. These should be added to the summary table. Figures 3 and 4 are useful, but for example, it would be good to have some description about what their main design differences are, and why those changes were implemented based on their usability testing results.

My other main concern is that we don't have a measure of the impact of this new UCD method. How do we know whether it's worth adopting as feedback designers? This could potentially be demonstrated by improvements in usability metrics over the iterations (which may be solved by addressing my main point above) - but they aren't provided - or some measure of uptake vs non-UCD feedback reports in practice.

Some more minor comments:
- Is the example about paper or computerised feedback? Needs to be clearer
- There are way too many acronyms - many are used once or twice only and therefore can be just spelled out
- 'Feedback' and 'A&amp;F' is often used interchangeably. I'd suggest picking one and sticking with it for consistency
- Are any theories / design guidelines / informing usability evidence recommended to design feedback reports as part of the UCD method (i.e. the Display part)? Or were any used in the example given? I don't think any were mentioned.
- The 'iterations' need more detail - was each iteration usability tested? If so, how many people were used in the tests? How do you know when to stop doing more iterations?
- How do you do usability testing over the phone (p18 line 17)? This seems very difficult as is suggested in the discussion section - and there are accepted ways of doing remote usability testing https://www.nngroup.com/articles/unmoderated-user-testing-tools/
- The use of the word 'methods' line 6 p14 is confusing as it's in the results section
- A balanced discussion of the pros and cons of this approach would be helpful including other options available to feedback designers instead of this one. For example, Borycki et al ('Usability Methods for Ensuring Health Information Technology Safety: Evidence-Based Approaches. Contribution of the IMIA Working Group Health Informatics for Patient Safety') recommend lab-based, 'in situ'/simulated, and naturalistic testing
- Table 1 - don't you also need someone to conduct the usability testing? Or is that the manager? I would have thought that's a separate job?
- When refining the Measures and Data for the feedback report - isn't it a limitation that you need to work with real-world data to see what the usability problems are, and what information is possible to present in the feedback report? For example, a user may say they would like to see X, Y, Z, but X may not be in the dataset, and it may be impossible to calculate Y or Z.

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