Reviewer’s report

Title: Can an App Supporting Psoriasis Patients Improve Adherence to Topical Treatment? A single-blind randomized controlled trial

Version: 1 Date: 21 Dec 2017

Reviewer: Alexander Nast

Reviewer’s report:

Thank you for your RCT protocol. It is very well written and comprehensive.

- please clarify in the title/abstract what you mean by 'a designed patient-centered intervention.....'

- how the EM cap measures treatment session (cap being taken off, or similar)

- please clarify the randomization methods - block randomization stratified by age and gender (or also socioeconomic status, illness duration etc; see page 13 and page 19)

- please clarify your null hypothesis. I assume that both groups receive the medication with the EM unit (Otherwise the difference in treatment sessions between groups could not be measured). If I understood correctly, you then actually measure the 'adherence in intervention group (EM + App) versus non-intervention group (EM no App). In this case it would be very important to add information about the intervention , which is the APP (not the EM unit). Please add a section on the App - what kind of messages are send, how often, are pictures being used, does it pop up on the screen, is the information send based on a theory or similar. Perhaps the TIDIER checklist would be useful here http://www.bmj.com/content/348/bmj.g1687

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.

Unable to assess
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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