Reviewer’s report

Title: Accuracy of acute burns diagnosis made using smartphones and tablets: a questionnaire-based study among medical experts

Version: 0 Date: 03 Oct 2017

Reviewer: Van Baar

Reviewer's report:

The authors present an interesting study on the accuracy of acute burn diagnosis. In general this is a well written paper which contributes to our knowledge in this field.

However, some points deserve further attention.

Introduction:

It is not clear from the paper to what extent acute burn diagnosis is supported by screen in nowadays South African burn care.

Methods

Both accuracy calculations of burn size and burn depth need a golden standard or reference standard. Who or what provided these standards in this study? Please describe.

Surgery is the ultimate golden standard for deep or FT burns. Surgery is mentioned in the paper, but is not reflecting the actual treatment.

Can you include the surgery details in the paper? If not, this is a limitation of the study that needs to be addressed.

Which criteria were used to select the eight participants for the laptop assessment?

The categorization of burn depth in surgery versus no surgery leads to misunderstanding in the text. As I understand; these categorie do not reflect treatment; but only burn depth. Please adapt the names of these categories, to elucidate this point.
Please include the description of calculation of sensitivity and specificity in the method section: which reference standards are used?

The author do not provide the standard error of measurement of burn size. Please provide.

Please present a figure with an example of an image with additional information, as provided to the participants.

Results:
Please provide the raw data the main tables 3 and 5,

Discussion
Is there any relation between familiarity with Fitz Patrick skin types and accuracy of burn depth diagnostics? Can the authors give the skin types represented on the images?

Does familiarity with skin types influence accuracy of burn depth of wound in patients with these skin types? Does this influence the value of remote advice by non-local specialists?

R 287: Please rephrase; burns that needed surgery: If this is a proxy for deep and full thickness burns please rephrase. Please add info on the actual surgery status.

R290: overestimation is as common as underestimation: this would be the case if prevalence of 'surgery was equally distributed. I suppose this is not het case in your sample.

R334: Statistical note, unclear for non-statistical reader, please elaborate.

**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 recommend additional statistical review

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

Acceptable

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