Reviewer's report

Title: Drivers of telemedicine use. Comparative evidence from samples of Spanish, Colombian and Bolivian physicians

Version: 1 Date: 9 December 2013

Reviewer: Albert Alonso

Reviewer's report:

This manuscript reports on a study that aimed at explaining the determinants of telemedicine use by physicians in three countries: Spain, Colombia and Bolivia. This sounds as an ambitious endeavour, given the intrinsic complexity of understanding the reasons behind adoption of telemedicine by health professionals as a part of their daily practices. The authors, however, have limited their work to an ex-ante analysis by focusing on 5 aspects: optimism, perception of usefulness, ease of use, propensity to innovate, and level of personal use of ICT. While these are indeed factors to be taken into account and seems reasonable to consider them, one wonders whether their weight might be determinantal in front of others (ex: health administration plan for implementing a subsidised tele-dermatology programme for early screening of melanoma).

The investigation has been carried out in three distinct locations where findings are dissimilar. The authors provide convincing explanations for the differences observed. In any case, the differences found support this notion of complexity around the precise determination of drivers for adoption of telemedicine.

The methods applied to the research work are sound. The use of TAM is common in this type of studies and the questionnaire developed in the CICUS project seems to fit well into the needs of the study.

The results and following discussion have a rather limited value. The findings seem to be rather common sense but the goodness of the manuscript is the formalisation achieved. Possibly, these drivers alone are not sufficient to explain the adoption of telemedicine but provide some clues that might be useful. Thus, the consistency of the variable “level of use of ICT –in private life” as an explanatory factor can be positively used to customize training strategies in telemedicine.

Major Compulsory Revisions

None.

Minor Essential Revisions:

1) Verify the format that is used when introducing references in the text. Not sure if it is the one described in the guide for authors.

2) Page 4: The expression ".. to understand the effects of telemedicine use on
health outcomes, it is crucial to analyse the prior step, that is to say, to perform an ex-ante analysis to determine what factors explain physicians’ telemedicine use." seems to establish a relation of causality that might not be correct as a single reason to explain the findings. Maybe a milder way of expressing it would fit better.

3) The term “telemedicine” and the acronym "ICT" are used as synonyms throughout the text. However, this is not correct, as it is in fact described in table 2. The latter includes the former but not the other way around. Importantly, telemedicine does not generally imply a significant change in the organisational domain while in the case of ICT (for instance, collaborative integrated care environments) the weight of the organisational aspect might be dominant. This might be an important aspect with regard to the discussion of findings.

4) The terms “technology” and “ICTs” should be used consistently when enunciating the hypothesis, maybe with reference to the definitions used in table 2 as previously mentioned.

Discretionary revisions
1) The title of the manuscript generates more expectations that actually delivers. Maybe a more focussed wording would be more appropriate.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:
I declare that I have no competing interests.