Reviewer’s report

Title: Identifying effective components for mobile health behaviour change interventions for smoking cessation and service uptake: protocol of a systematic review and planned meta-analysis

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Reviewer: Andrea Patey

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Identifying effective components for mobile health behaviour change interventions for smoking cessation and service uptake: protocol of a systematic review and planned meta-analysis

Authors: Pritaporn Kingkaew, Liz Glidewell, Rebecca Walwyn, Hamish Fraser and Jeremy C Wyatt

Reviewer: Andrea Patey

General comments:

This Systematic review protocol outlines a proposal to review mobile Health (mHealth) interventions as they relate to smoking cessation. The authors acknowledge that meta-analyses of mHealth interventions for smoking cessation exist and whilst effectiveness of these complex interventions may be evident, none have examined the effect of mode of delivery, duration and intensity of the intervention, and tailored functionality has on intervention success. This protocol aims to identify the effective components of behaviour change interventions related to two smoking cessation behaviours; 1) decrease smoking rates and 2) increase use of smoking cessation services.

The authors present a clear protocol for article identification with inclusion and exclusion criteria, data extraction and analysis. This protocol is well thought out and provides a unique investigation into the components of behaviour change interventions not yet addressed. Although another group has a similar review, the authors report the difference between the two reviews. There are however, some things the authors may want to consider for the systematic review going forward.

Minor Revisions:

1. The authors indicate that they intend to report whether theory was used in the design in the intervention. It may be of benefit to use the Theory Coding Scheme (Michie and Prestwich, 2010) as a tool to better report the use of theory.
2. The authors indicate that they will code the intervention for BCTs. Will they be coding the intervention descriptions as published or will they be contacting authors of the interventions for additional intervention materials? Either would be suitable (with their own inherent limitations) but at the moment it is currently unclear in the protocol.

3. It is unclear in the protocol whether the authors plan to code the comparator groups (whether control, usual care or alternate intervention). BCT coding of the comparator groups is critical to identify those components that are different in the groups that may prove more effect than others. I would suggest coding the comparator groups.

4. I'm not entirely sure how you will identify those BCTs used for improved utilization smoking cessation services versus those for smoking cessation.

5. Meta-analysis reporting risk ratio will be used for smoking behaviour, but no meta-analysis reported for the utilisation of smoking cessation services. Is there a planned meta-analysis for utilization of services? Is the utilization of services part of the descriptive analysis and it's not really two behavioural interventions?

I look forward to seeing the completed Review in press in the forthcoming year.

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