Reviewer's report

Title: Effective Feedback to Improve Primary Care Prescribing Safety (EFIPPS) a pragmatic three-arm-cluster randomised trial: designing the intervention (clinicaltrials.gov registration NCT01602705)

Version: 2  Date: 14 April 2014

Reviewer: Carmel Hughes

Reviewer's report:

Most of my queries are due to lack of clarity and the sequence of material, so all are considered compulsory.

Abstract-I was a little confused about the order in which things were done and how the components of the intervention were selected on the basis of theory. As written in the methods section of the abstract, it appeared that part of the intervention was feedback of practice rates of high-risk prescribing had already been selected as part of the intervention in advance of the theory-informed intervention? Was feedback not part of the intervention? I would have thought that the theory work would have come first in all of these stages? And I didn’t quite follow how the intervention was embedded in the feedback. Surely feedback was part of the intervention, and this seems to be the case in the full Method section. The Results section in the abstract was hard to follow because of my queries above. I think it is partly an issuing of sequencing of material and clarity, as the ensuing Background and full Method are much easier to follow. The Abstract will need some further work as some important detail is missing (aspects around behaviour elicitation and a Delphi questionnaire) and the sequence of material is not quite right.

Background- No issues

Methods-I think it would be helpful to explain why activities were performed in the order that they were done. Readers may expect to see the theory aspects first, but clearly the authors have examined other trial approaches such as that of PINCER, and have opted for feedback as a central part of the intervention. This seems to be confirmed by the text which describes the intervention components of which feedback is one component.

Why 5 rounds of the quarterly written feedback, and how did this work? I assume that this would involve more than 12 months?

How did the authors discern that the Advisory Group’s recommendations were ‘theory-informed’? They give examples of such elements, but this was their interpretation. When discussing feedback, was it discussed in terms of behaviour change?

The authors justify their usage of the Theory of Planned Behaviour as it ‘has been validated and used rigorously in various health settings’. However, how did
the authors know that it was the most appropriate theory to employ to affect the
behaviour that they wanted to change? This also applies to the Health Action
Process Approach. The selection of the theories seemed to come before the
identification of the target behaviours in the paper. The authors go on to describe
the types of processes which might be undertaken by GPs. I had wonder if there
had been any attempt to confirm these behaviours using some type of
behavioural elicitation questions with GPs, and then realised that this was in the
next section. I would expect this type of exercise to have taken place in advance
of identifying the targeting behaviours as this is the most logical process. The
order and sequence of material in this paper will need some attention.

What was the sampling frame for the GPs who took part in the Delphi and how
were they identified and recruited?

In terms of mapping the targeted variables to BCTs, why did the authors map the
TPB and HAPA to the BCTs, and not the behaviours that had been identified by
the behavioural elicitation phases? Surely the latter would have been most
important as these would have been the behaviours demonstrated by the GPs
and therefore, the target for change?

Results: there are aspects reported in the results that would be better in the
Method e.g. the number of GPs to whom the questionnaire was emailed, the way
in which the data were handled in terms of % agreed/disagreed.

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

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

'I declare that I have no competing interests'