Reviewer’s report

Title: CARer-ADministration of as-needed subcutaneous medication for breakthrough symptoms in homebased dying patients (CARiAD): study protocol for a UK-based open randomised pilot trial

Version: 0 Date: 20 Dec 2018

Reviewer: Sarah Cockayne

Reviewer’s report:

Thank you for the opportunity to review this interesting, manuscript, which describes a protocol for a pilot trial of administering as-needed subcutaneous medication for breakthrough symptoms in home based dying patients. As this protocol has been fully peer reviewed as part of an external, funding application to the NIHR HTA, and has received ethical approval, I have performed an editorial review of the protocol only.

The manuscript is well written and I would support its publication. Thank you for completing the SPIRIT checklist. I note there are a couple of omissions, so can you please add some additional text for the following points:

1. Item 5b of checklist page 27 of the manuscript please give the name and contact details of the study Sponsor.

2. Item 5c of the checklist page 27 of the manuscript, please include some additional text to clarify the role of the Sponsor.

3. Item 5d of the checklist page 27 of the manuscript, please include some additional text to clarify the composition and role of the TSC.

4. Item 21a of the checklist page 27 of the manuscript, please include some additional text to clarify the composition and role of the DMEC.

5. Item 25 on the checklist; please confirm how important protocol modifications will be made subsequent amendments be sent to ethics

Other points:

1. Regarding the eligibility criteria, can you please clarify if any specific criteria will be used to assess:

   a. when a patient has entered the 'last weeks of life’ and is likely to lose the oral route for medication
b. the carer's mental state, vision and physical condition

c. relational issues

d. a history of substance misuse in a family or is this purely a clinical judgement of a health care professional?

2. Page 15 lines 9-12 will data entry staff be blind to group allocation?

3. Adverse event reporting. Can you please include a definition of an adverse event for this study; define the reporting period and if adverse events for both the patient and carer be collected and reported?

If these changes are made I would be supportive of its publication.

Level of interest
Please indicate how interesting you found the manuscript:

An article whose findings are important to those with closely related research interests

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

Acceptable

Quality of figures
All images and figures within the manuscript should be genuine i.e. without evidence of manipulation. No specific feature within an image may be enhanced, obscured, moved, removed, or introduced. If you have concerns about the veracity of the figures you should choose the first option below.

Statistical review
Is it essential that this manuscript is seen by an expert statistician? If so, please give your reasons in your report.

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:
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No