Reviewer's report

Title: Impact of a hospice rapid response service on preferred place of death, and costs: a stepped wedge randomised trial

Version: 1 
Date: 7 April 2015

Reviewer: Geoffrey Mitchell

Reviewer's report:

This is a complex analysis of a rapid review service (RRS) for people at the end of life, posing the question whether the presence of a RRS improves the chance of a person achieving death in their preferred place of death compared with a control group. The project has a stepped wedge design. It compares a control group, intervention patients who used the service and intervention patients who did not use it.

The quality of study design is clear, and the depth of analysis of primary and secondary objectives is impressive, though no power calculation was presented. There is no sample size estimation. However, given this was a pragmatic trial assessing what happened as a service was expanded into new areas means seeking a pre-calculated sample size may have been problematic, given that the numbers referred were not controllable by the researchers. However, I do believe that a power calculation would have given the reader a sense of its reliability.

The limitations are identified well. I was interested in the observation that as new areas were introduced, the same team delivered the care to each area. This must mean that the nature of the service offered at the end of the intervention was different to that at the beginning? I think this is more of a methodological limitation than is currently made out. I think it is more than simply staff being stretched at the end. Can you consider your comments more about this point.

Also the main finding is expressed as a double negative, which means the reader has to think carefully about what is being said. Can it be expressed as a likelihood ratio that the use of the RRS improves the chance of dying in their preferred place?

A couple of corrections required -

Table 4 identifies Ashford as Area 1- this should be corrected

Figure 2 - I think there is an error in the box labelled New referrals. I don't think there were no referrals to the service in Area 1.

Level of interest: An article of outstanding merit and interest in its field

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.