Reviewer's report

Title: Home and community care services: a major opportunity for preventive health care?

Version: 1 Date: 10 February 2010

Reviewer: Jeff Poss

Reviewer's report:

The thrust of the paper and its goals are clearly stated, and it provides useful fundamental descriptive information on this community dwelling population and receipt of services. The paper is clear and well written. It attempts to make good use of two available data sources, a large voluntary survey, and HACC administrative data.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Page 6, duplication of “HACC MDS data for the period 1 July 2003 to 30 June 2008 were available for our study.”

Also on Page 6, the HACC MDS data is described as capturing only 85% of clients, what is the source of the shortfall, and is this an additional source of non-response bias in addition to the major point, see below.

Major Compulsory Revisions (which the author must respond to before a decision on publication can be reached)

The major concern I have relates to the non-response bias in the survey data in the 45 and Up Study. While the design of the 45 and Up Survey is as a longitudinal cohort, the use of the data here is cross-sectional and an 18% response is very low. The use of a mail-in survey supplemented by media coverage to attract additional participants, is most certainly to result in a biased sample, and the authors acknowledge this in the discussion (although more details on the 45 and up study, including the recruitment and response rate, should be in the methods section). What is troubling is that it is acknowledged, assumed to bias the findings on the conservative side, and then no further thought or warning is given to the reader to this fundamental issue. At a minimum some effort would need to be made to match the demographic characteristics of the 45 and up study sample to the census population; ideally the survey would estimate characteristics of non-responders and compare them to responders. I searched the survey website and beyond and could not find published evidence that this had been attempted; I would like to see it if it exists. I believe there is a danger in publishing this paper as it stands, since a reader may not appreciate the seriousness of the limitations, and then the relative risk values will get cited as generalizable findings, and then they will have a life of their own. In all likelihood the sampled population probably is under-representative of the sickest
portion of the population, but it doesn’t automatically follow that all the tested characteristics themselves will result in conservative estimates. I suspect the truth is probably more complicated, and that the relationship of some characteristics could even be over-stated. However, the direction of the findings do fall in line with what would be expected in the general population, but the point estimates of relative risks are problematic to me.

**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