Reviewer's report

Title: Observed intra-cluster correlation coefficients in a cluster survey sample of patient encounters in General Practice in Australia

Version: 1 Date: 24 September 2004

Reviewer: Obioha Chukwunyere Ukoumunne

Reviewer's report:

Minor essential revisions:

1) In the methods section the authors say that the means and proportions of the outcomes were unweighted in the analyses so that the best estimate of the ICC could be obtained. What is meant by "best" and why does an unweighted analysis lead to better estimates of the ICC?

2) Last paragraph in the methods section: change "co-efficients" to "coefficients" in line 3.

Discretionary revisions:

1) Comment: when analysing the rates for treatment received I presume they were calculated as percentages of the total number of consultations. I wondered how these results might differ compared to if the rates were calculated as percentages of the consultations for which the patient presented with specific conditions that indicate the need for a specific treatment.

2) In the abstract - second line from bottom, change "April 2002 and March 2003" to "April 2002 to March 2003".

3) Would the estimated ICCs also be useful to researchers planning cluster randomised trials. The estimates from this study certainly have the benefit of being estimated with a high level of precision. A comment on the extent to which estimates of the ICC from surveys might be relevant to cluster trials, for which the clusters are not necessarily representative of those in the population.

4) In Figure 1 a label "descriptive outcome" is given on the x-axis but there is no group heading for the morbidity outcomes.

What next?: Accept after minor essential revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No