Reviewer's report

Title: Diagnostic performance of the Minimal Eating Observation and Nutrition Form - Version II (MEONF-II) and Nutritional Risk Screening 2002 (NRS 2002) among hospital inpatients - a cross-sectional study

Version: 1 Date: 7 July 2011

Reviewer: Mary Hickson

Reviewer's report:

Major compulsory revisions:
p6 - the procedure for the data collection is currently very unclear - 'during lunch or dinner on one set day in Nov 2010 - I am confused how 4 nurses can screen 87 patients with three tools on one day. that would be 22 patients each, during the day, they would have to get consent and then do all the assessments and data collection. it does not seem possible. This whole section needs clarification.

There is no also consistent information about how many wards / nurses.

the line 'oral information was provided to all nurses in a single group session....etc' when was this done?

user-friendliness of tools - do you mean the four assessors/nurses - that does not seem a very big sample. You need to state this more clearly.

p7 - you do not clarify how many patients were over and under 65yrs of age. So we do not know how many you excluded in the secondary analysis.

text on this page does not match figures in table 2 - should be 16-62% I think - but as I said above, these figures are confusing.

Table 2 - please add a note to show clearly how you have defined at risk of undernutrition for each tool. e.g. MNA <24 or <17?

What are the numbers in bracket and those without - are one set %? they do not seem to add up for example - in the stroke column - n=21 but the figures in that column add up to 30 (11+6+13).

Table 4 - your last 4 items - instructions clear etc would appear to be out of 4. Thus, providing a % is very misleading. Please change this.

Minor essential revisions:
p4 - assessments - please list the data collected in its entirety, not just some of it as implied by 'such as'.

p5 - NRS2002 - you have not made it clear how you have dealt with the two parts to this screening tool. in your sample did all patients need to be assessed using part 2 or were some not at risk as identified by part 1 of the NRS? You need to
make this clear as this is the only two part tool as I understand your methods.

p4 - do you mean 4 wards - this is confusing to the english reader. we have department which may have several wards. you state 4 department but then imply later on p6 that only 4 nurses were involved - one on each ward.

p6 - weblink to the tool - I think there may be an error in the english tool. part 2a - should the second box be labelled 70yrs or OLDER, not younger.

Table 1 - MNA is used as the 'gold standard' but you have not justified its use in a mixed group which contains patients younger than 65yrs.

I do not understand 'internal attrition n=2' what do you mean and why? - also no table 2

This is a paper of some interest to those deliberating on the most appropriate tool with which to identify malnutrition in hospital patients. The authors have shown the sensitivity in relation to other commonly used tools. I am confused as to why all fours tools were not examined together in one paper. there is significant lack of clarity around the description of the methods and this is the area that needs correction.

**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'