Reviewer’s report

Title: Knowledge and attitudes of primary health care physicians and nurses with regard to population screening for colorectal cancer in Balearic Islands and Barcelona.

Version: 3 Date: 2 April 2010

Reviewer: Paolo Giorgi Rossi

Reviewer’s report:

The paper has still some relevant methodological flows:

1. The sample is a stratified sample even if they do not recognise it: the strata are, at least, Baleari and Barcelona. In fact, the sampling fraction is 1 in Baleari and 1188/(total number of eligible subjects) in Barcelona. Consequently if your Universe is the union of Baleari AND Barcelona and you want to produce estimates for this universe, your statistical units must be weighted because any unit in Barcelona represents, for example, 2 units of the universe, while any unit in Baleari represents only itself.

2. Sampling the whole universe means that you do not need to infer estimates from sample to universe. Consequently p-values are not meaningful. When I asked what the meaning of p in these analyses, I meant something more epistemologically complex than your answer “p-value”. I suggest to drop all the tests measuring difference between physicians and nurses for two reasons: 1) with this sample the p-value it is difficult to interpret; 2) you are not interested in discussing obvious differences among physicians and nurses. The only inference that you can leave is for the model.

3. data on prescription and GPs’ recommendations were present in the questionnaire but are not reported in the result section. Finally these data are commented in the discussion. Please report these data even if you have many missing values.

4. Probably the authors are right: the attitudes may be measured only by propensity and not behaviours, but we have also a problem with knowledge: I respect the decision not to make a score, but the table presenting “knowledges” is now a mix of knowledge and beliefs (in particular the last two items “Colonoscopy/FOBT is too risky to be a screening test”). The discussion about knowledge is contradictory. The only quantitative data that have a standard are the believes about lung cancer screening and PSA. Please rename the table and drop the sentence in pag 6. comment only quantitative data that can be compared with other studies or between groups.

5. The first sentence of the conclusions is apodictic and not useful.

These point must be addressed.

Furthermore, I try to give some suggestions to improve the paper and I hope the
authors will be less presumptuous and will take into account the comments more seriously.

The introduction is still too long:
The first paragraph of the introduction is still too long (for example, the Spanish situation is faced at beginning and at the end of the paragraph).
The first sentence of the second paragraph is not useful.
Some other sentence may be dropped.

Methods
See point 1 nad 2
The analysis of “knowledge” is still a mix of “knowledge” and “beliefs”
The model building strategy is still not clear.

Results
I am still convinced that both the items “being reluctant…” and “agreeing to play a role in the screening…” measure positive or negative attitudes to screening, consequently are two parts of the dependent variable in your study. Please drop from the model the second item, but comment why there is so weak correlation between two variables that should measure two dimensions of the same concept.
The way of presenting the model is redundant: drop beta and p values (if you do not present the constant of the model, the b values are completely redundant with OR).

Discussion
Page 6, second par: “Our results show that the knowledge of PHC professionals about colorectal cancer and population screening is good overall”. I really do not understand how did you measure it, and to which standard did you compare it.
I suggested two possible ways to discuss this point: 1) a score, but you did not accepted this suggestion; 2) to use some alarm answers: a sentence about this point has been added in the discussion (pag 7). This finding clearly contradicts the sentence on pag 6.

Conclusions
The apodictic affirmation “PHC professionals have a positive predisposition towards population screening for colorectal cancer”, without any comparison with previous surveys or standards, is not scientific and not useful. This is what I meant with “absolute results”. We need a benchmark with previous literature, for example “the attitude are more positive than what found by XXX in UK”.
The abstract conclusions are slightly better.

**Level of interest:** An article whose findings are important to those with closely related research interests
Quality of written English: Needs some language corrections before being published

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:
'I declare that I have no competing interests'