Reviewer's report

Title: Evaluation of PROforma as a language for implementing medical guidelines in a practical context.

Version: 3 Date: 13 February 2006

Reviewer: Samson Tu

Reviewer's report:

General

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

1. p. 17. "We found that the logic of the medical process involved could be readily described using the constructs provided by PROforma...."

p. 17. "The actions described in the process description used in our system are intended to be mutually exclusive... However PROforma provides no mechanism by which such a constraint can be expressed, checked, or enforced."

These two statements seems to contradict each other. If the domain requires specification of mutually exclusive actions and PROforma does not provide the means for doing so, how can the authors make the first statement?

Suggested change "We found that most of the logic of the medical process involved could be readily described using the constructs provided by PROforma...."

2. p. 21-22. "Taking these decisions [about whether to include cardiovascular risk calculation in PROforma],... is however a matter of judgement and we recognise that although the decision was not justified on the basis of the ease with which the assessment could be done in PROforma, the logical adequacy and heuristic support were factors in the decision."

The topic was about logical adequacy and heuristic power; please explain and elaborate on how "the logical adequacy and heuristic support were factors in the decision." Suggested change: perhaps mention that PROforma is designed to model processes and decisions, not inferences based on statistical models.

3. p. 24 "In general we feel that the PROforma meets the demands of this application for logical adequacy in all three phases." See #1. above.

Suggested change "PROforma meets most of the demands..."

4. p. 25. "The most interesting reflections on heuristic power emerged during system design and concern the decisions made in setting the scope of the guideline" Heuristic power, according to definition on p. 12 is about "does the language allow the system to draw the required inferences and solve problems?" This reviewer fails to see how scoping decisions relate to the ability of the system to draw inferences and solve problems. Either make the relationship clear or explain the category of "heuristic power." See #2.
Suggested change: redefine "heuristic power" to include whether the

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

p. 27 Start new sentence at "however, had the logic of the system been more complex..."
p. 21 "Taking these decisions ..." perhaps "Making these decisions..."?
p. 31 Delete "a" in "thoughtful comments of a the BMC reviewers".
Figure 5. "Return in Eight Weeks" box. Should the text be "Set monitoring period to *eight* weeks"?

Discretionary Revisions (which the author can choose to ignore)

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No

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