Author's response to reviews

Title: A computer decision aid for medical prevention: a pilot qualitative study of the Personalized Estimate of Risks (EsPeR) system.

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PDF covering letter
**Answers to reviewer 1 (John Fox, 17 Jul 2003)**

**Major compulsory revisions**

1. **Detailed research methods (bridge between the methods and the conclusions)**

   Methods have been depicted in more details, namely
   - the procedure of sampling (see answer to reviewer 2, point 3 in Major compulsory revisions) and
   - the procedure of collecting the verbatim of focus groups (see correction in Methods section of revised manuscript)

2. **Actual description of the data**

   A complementary table (Table 3) is proposed for addition in the revised manuscript. Extracts of original comments by the physicians are presented as collected in discussion notes (on prevention at the beginning of the focus group or on the evaluation at the end of the focus group) and/or in answer forms filled out by participants for 6 to 12 clinical scenari.

3. **New inferences introduced in discussion**

   The clarification of methods and rewriting of discussion should improve on this point.

4. **Reading of table 2 (which has become table 4 in revised manuscript)**

   The methodology underlying the presentation of table 4 has been depicted in more details in methods section (description of an example of clinical scenario, of the answer form to a scenario and methods to analyse the answers in light of the qualitative verbatim obtained from discussions and participants’ open comments).

**Discretionary clarifications**

1. **Description of participants**

   A table has been added to describe the characteristics of participants (age, sex, setting of practice, use of informatics in their practice)

2. **Scope of the system**

   (Corrected in revised manuscript): EsPeR is aimed to address the prevention of avoidable morbidity and currently addresses the risks mentioned in the Methods section (§ Knowledge base)

**Answers to reviewer 2 (Jon Emery, 12 Aug 2003)**

**Discretionary clarifications**

1. **Complementary screenshots**

   Figure 2 and 3 are proposed for addition in the revised manuscript
Minor compulsory revisions

1. Cardiovascular disease risk model
(see point 1 in major compulsory revision)

2. Cervix cancer
Cervix (or cervical ?) cancer

3. Doctors « lack of knowledge »
Unclear sentence corrected in the manuscript

Major compulsory revisions

1. Choice of risk models applied in the software
   - Framingham risk equations : (see revised manuscript) We actually present the Framingham model in EsPeR, along with some explanation of its performance and validity in the “Documentation” section of the site. Given available evidence, we admit that it is appropriate for risk stratification but it systematically overestimates the risk in French population. We intend to include more recently published model (SCORE project) which may be more adapted to Southern European populations but are not yet really validated.

   - Gail model and risk factors incorporated in EsPeR for breast cancer screening : The Gail model is used as published, only for the estimate for relative risk as no estimate of absolute risk has been validated with French data. Variables used in the model are :
     - AGEMEN : age of menarche (0 : >=14 ; 1 : [12-13] ; 2 : <12 ans)
     - NBIOPS : number of anterior breast biopsy (0 : 0 ; 1 :1 ; 2 :>=2)
     - NUMREL : number of 1st degree relatives (mother, sisters) who had breast cancer (0 :0 ; 1 :1 ; 2 :>=2)
     - AGECAT : 0 : (age <50) ; 1 (age>=50 ans)

2. Preventable fraction of all cause mortality
   (See in revised manuscript) The method of computation of the risks of death has been further detailed. We did not calculate the preventable fraction of all cause mortality. We estimated probability of each cause of death which is demonstrated as being partly avoidable by some efficacious prevention measures.

3. Methodology of qualitative study
   - Sampling procedure : the sampling method has been depicted in more details in the revised manuscript. The main points are : 1) the procedure was different for the January session and for the October session (and clearly more traceable in October). 2) For all recruitment, criteria were minimal computer literacy and voluntarism. We did not select further. A description of the characteristics of participants has been added in the manuscript (table 2).

   - Number of physicians approached. It is possible to answer only for the October session : 572 physicians were mailed, 21 answered and agreed to participate, 14 were actually present to the focus groups session. No follow up of non responders was done.
Transcription of discussions: the method used for transcribing discussions on prevention and on the evaluation of EsPeR has been further detailed and discussed in revised manuscript. Our method was pragmatically adapted to the constrained resources available for this pilot evaluation, with the underlying objective to prepare a more extensive qualitative study of EsPeR in ambulatory care setting, which is currently on the way, with the collaboration of a social scientist.

Presentation of original data: see answer to reviewer 1, point 2 in Major compulsory revisions.

4. Two successive versions of the EsPeR software
(See corrections in the revised manuscript)
Since the development of EsPeR is a continuous process, the version 2 evaluated in October and the version 1 evaluated in January differed from several improvements in ergonomics and interface (management of windows and frames, navigation facilities, etc.) and from the addition of several guidelines (namely for the diagnostic of depressive syndrome and the risk related to alcohol consumption).

5. Clarification of several sentences
See corrections in the revised manuscript

6. Feedback to ANAES
(See corrections and detail in the revised manuscript, Discussion section)

Answers to reviewer 3 (Jonathan Wald, 31 Aug 2003)

Discretionary revisions

1. How long the EsPeR system would take to use
(see correction in Results section of revised manuscript)
It took 2h30 to work on 8 to 12 clinical scenarios in the focus groups in January and 2h to work on 6 clinical scenarios in October. This time includes the reading of the scenario, the capture of data in EsPeR, the reading and understanding of risk estimate and guideline messages, and its critical appraisal to fill out a structured answer sheet asking the physician for his/her own risk estimates and prevention strategies.

2. Figure 1?
I do not know why it could not be visualised? (I sent it as a powerpoint file)

3. Understanding of table 2 (which has become table 4 in revised manuscript)
(See answer to reviewer 1, point 4, in Major compulsory revisions)

4. Motivation of physicians
All participating physicians were paid to make up for their loss of activity during the one day focus group. Two criteria were used for selection: to be volunteer and to have basic computer literacy.
Most physicians did not expect a software like EsPeR when volunteering, but most finally welcomed it as a structuring tool and as “disturbing” (EsPeR had them think over twice about priorities in prevention and estimate of risks)
Minor compulsory revisions

1. Clarification of several sentences

(See corrections in revised manuscript)