Reviewer's report

Title: Amsterdam Wrist Rules, A Clinical Decision Aid

Version: 1 Date: 3 May 2011

Reviewer: Alex Burdorf

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Major Compulsory Revisions

1. The description of the study population is odd: "are suspected to have sustained a distal radius fracture and who are send for X-ray." This is most likely not correct/intended, by definition all suspected cases should be referred to X-ray.

2. The symptoms for inclusion should be described as precisely as possible, with the exact operationalisation of the parameter (e.g. crepitations is much too vague)

3. The main study outcome measure should be defined on basis of exact interpretation of X-ray, which may require a more detailed description here.

4. The CRF contains 20 parameters, which should be defined one by one in order to know what the potential input of the model is.

5. The validation is not entirely clear. Will the developed model by applied and subsequently be evaluated in subsequent patients (who will all receive X-ray)? OR is it in fact a study of 1000 patients whereby 500 patients are used to develop the model and another 500 to validate. in the latter scenario it is advised to sample 500 patients randomly across the inclusion period !

Minor Essential Revisions

1. "overall incidence of 26% per 10,000 person-years" This sentence is unclear, 26 per 10.000 pyrs? pyrs in the general population ?

2. A doubling in incidence 1965-1975 is of no interest today !

3. The number of patients and X-rays is confusing..

4. The study design is unclear, two cross-sectional studies but starting with a prospective study ?

5. How is dealt with inter-rater agreement of the skeletal radiologist ?

Discretionary Revisions

General remark

I am a little worried about the potential lack of an expert in medical decision modeling, but maybe such an expert is consulted and part of the research team.
**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'