Author's response to reviews

Title: World Health Organization fracture risk assessment tool in the assessment of fractures after falls in hospital

Authors:

Shin-ichi Toyabe (toyabe@med.niigata-u.ac.jp)

Version: 4 Date: 5 April 2010

Author's response to reviews: see over
Editor,

BMC Health Services Research

April 5, 2010

Dear Editor,

Thank you very much for giving us an opportunity to revise our manuscript entitled “World Health Organization fracture risk assessment tool in the assessment of fractures after falls in hospital” (manuscript ID: MS: 4102538282896851), which was previously submitted to BMC Health Services Research. We have revised the manuscript in accordance with the comments by the referee and have also provided point-by-point replies to questions from the referee in this letter. All of the corrections in the manuscript have been underlined.

Sincerely yours,

Shin-ichi Toyabe, MD.

Crisis Management Office,

Niigata University Medical and Dental Hospital,

Asahimachi-Dori 1-754, Chuo-Ku, Niigata City 951-8520, Japan

TEL: +81-25-227-0375

FAX: +81-25-227-0375

E-mail: toyabe@med.niigata-u.ac.jp
To reviewer 2

**Major compulsory revision:** The authors would have been better to divide the dataset into one development and one test dataset. That way, they would be likely to have between 7 and 11 fractures in each dataset. They should also have a person blinded to the study hypothesis randomly divide the dataset and to designate one as the development and one as the validation dataset, so that the authors are not seen to be manipulating this process. The 95% confidence intervals for sensitivity, specificity and AUC should be presented for the development and the validation dataset so that the readers can see the level of uncertainty in these results.

**Our reply:** We appreciate your expert advice. According to your advice, the dataset was randomly divided into one development dataset and one test dataset by a person blinded to our study. The cut-off value of the STRATIFY score to predict falls and the cut-off value of the FRAX score to predict fracture after falls were determined on the basis of the results of ROC analyses in the development dataset. We added the 95% confidence intervals for sensitivity, specificity and AUC for development and test datasets.