Reviewer's report

Title: The Predictability of Claim-Data-Based Comorbidity-Adjusted Models Could Be Improved by Using Medication Data

Version: 5 Date: 22 April 2013

Reviewer: Patricia Halfon

Reviewer's report:

The article has limited value for the following reasons
-Lack of generalizability: a highly selected inpatient population (only 25% inpatients included due to debatable exclusion criteria); a model for each of the twelve conditions considered, selection of drugs to screen the condition debatable (for instance digoxine is no more used for heart failure except if auricular fibrillation; most other categories are disputable)
-the coefficients related to some comorbidities are negative suggesting bias (see charslon score for intra cranial injury!)
-Trivial enhancement of the prediction by drug claims; an inverse conclusion might be given as well: failure of drug data to enhance mortality prediction.....

Level of interest: An article of insufficient interest to warrant publication in a scientific/medical journal

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.