Prediction of Risk Factors for Falls in Elderly using Partial Health Information

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1-Introduction
Falls in the elderly are the number one cause of traumatic death in this population. We propose a Bayesian Network model to predict the risk factors for fall, built on the basis of -
- general statistical information (dataset)
- the knowledge about risk factors (Ontology)
- partial observation about a given person.
Data for this study was provided by Hospital of Lille, France.

2- Methodology

Data pre-processing, Missing value Imputation and Selection of Variables

3- Illustration

Data preprocessing, Missing value Imputation and Selection of Variables

4- Accuracy using all/ partial observations

5- Conclusion
The accuracy provided by the 5 classifiers are very similar, whether the prediction is based on the complete set of observation or on a subset (randomly selected). Further work is required to improve the use of this real dataset.

6- References