

Dataset and variables

A dataset with 711 from German health registry for the years 1984-1988. Health information for years prior to health reform. (dataset: `rwm.csv`). This dataset is a subset of the `rwm` dataset in the package `COUNT` in R.

The dataset consists of the following 4 variables:

`docvis`: number of visits to doctor during year

`age`: age: 25-64

`educ`: years of formal education

`hhninc`: household yearly income in DM/1000)

Questions

- 1) Run a Poisson model examining whether the number of doctor visits during year is associated with patient's age. Interpret the results.
- 2) Check for overdispersion and if it's detected, run the appropriate model that accounts for overdispersion. Interpret the results.
- 3) Check model #2 for zero-inflation.
- 4) Compare models #1 and #2.
- 5) Using the best model found in #4 run a multivariable model including all the variables in the dataset. Interpret the results.