

Zero-Truncated Poisson regression

Data Set : **hospitalstay**

- ▶ We have a hypothetical data file, **hospitalstay** with 1,493 observations.
- ▶ The length of hospital stay variable is **stay**.
- ▶ The variable **age** gives the age group from 1 to 9 which will be treated as interval in this example.
- ▶ The variables **hmo** and **died** are binary indicator variables for HMO insured patients and patients who died while in the hospital, respectively.

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##	stay	age	hmo	died
##	Min. : 1.00	Min. :1.00	0:1254	0:981
##	1st Qu.: 4.00	1st Qu.:4.00	1: 239	1:512
##	Median : 8.00	Median :5.00		
##	Mean : 9.73	Mean :5.23		
##	3rd Qu.:13.00	3rd Qu.:6.00		
##	Max. :74.00	Max. :9.00		



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- ▶ For the lowest ages, a smaller proportion of people in HMOs died, but for higher ages, there does not seem to be a huge difference, with a slightly higher proportion in HMOs dying if anything.
- ▶ Overall, as age group increases, the proportion of those dying increases, as expected.