Zero-Truncated Poisson regression

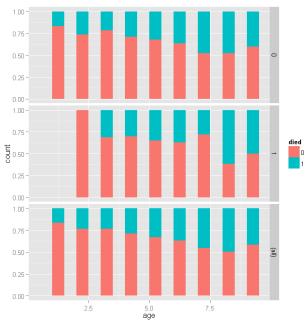
Data Set: hospitalstay

- 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
                               hmo
                                       died
                      age
                 Min.
                        :1.00 0:1254
                                       0:981
##
   Min. : 1.00
                               1: 239
                                       1:512
##
   1st Qu.: 4.00
                 1st Qu.:4.00
   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.