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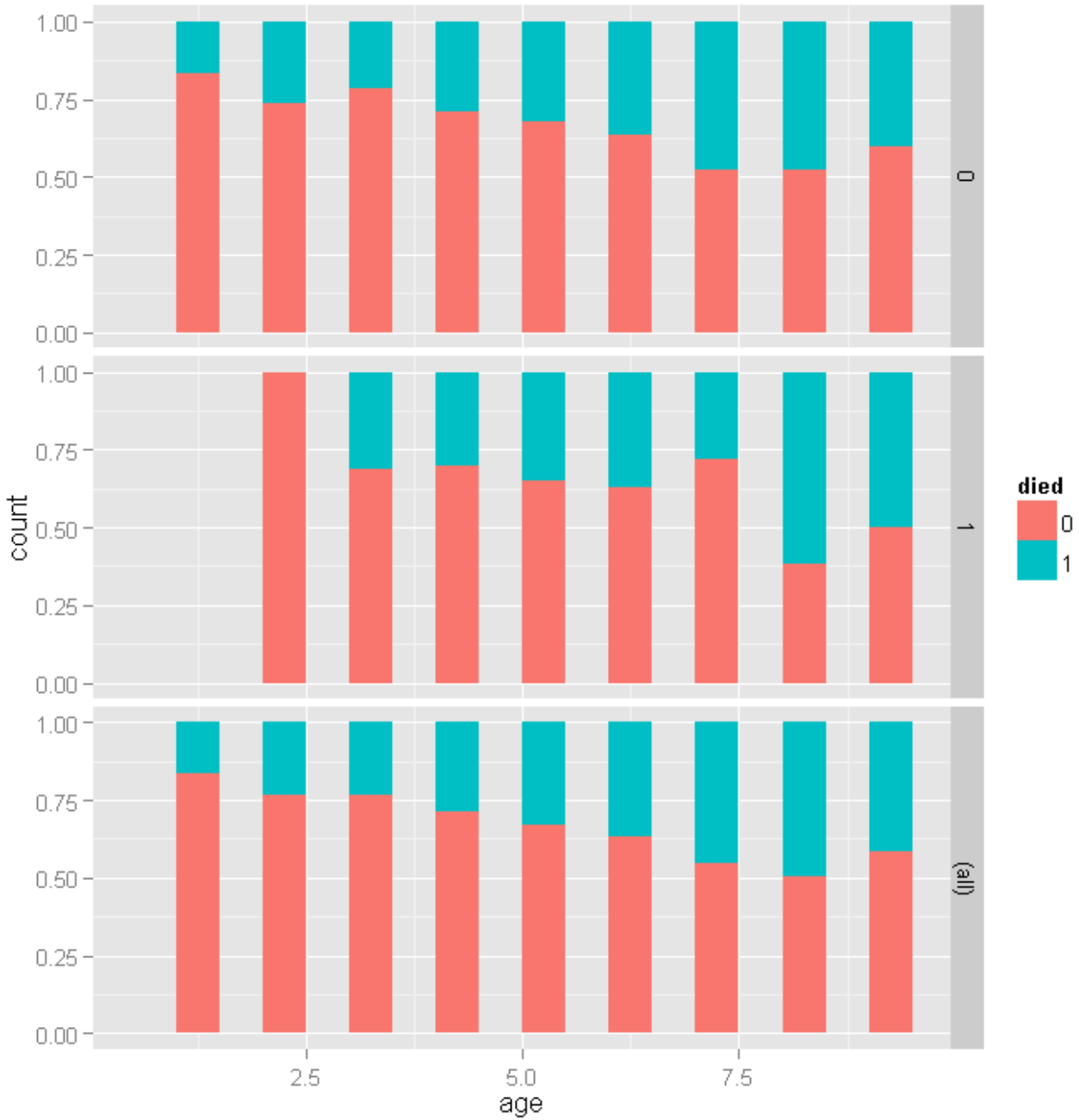
```
##       stay             age        hmo       died
##  Min.   : 1.00   Min.   :1.00   0:1254   0:981
##  1st Qu.: 4.00   1st Qu.:4.00   1: 239   1:512
##  Median : 8.00   Median :5.00
##  Mean   : 9.73   Mean   :5.23
##  3rd Qu.:13.00   3rd Qu.:6.00
##  Max.   :74.00   Max.   :9.00
```


1.00
0.75
0.50
0.25
0.00
count
0
1
(all)
2.5
5.0
7.5
age
died
0
1

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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.