

240. For a group of auto policyholders, you are given:

- (i) The number of claims for each policyholder has a conditional Poisson distribution.
- (ii) During Year 1, the following data are observed for 8000 policyholders:

Number of Claims	Number of Policyholders
0	5000
1	2100
2	750
3	100
4	50
5+	0

A randomly selected policyholder had one claim in Year 1.

Determine the semiparametric empirical Bayes estimate of the number of claims in Year 2 for the same policyholder.

- (A) Less than 0.15
- (B) At least 0.15, but less than 0.30
- (C) At least 0.30, but less than 0.45
- (D) At least 0.45, but less than 0.60
- (E) At least 0.60