

Axis Insurance

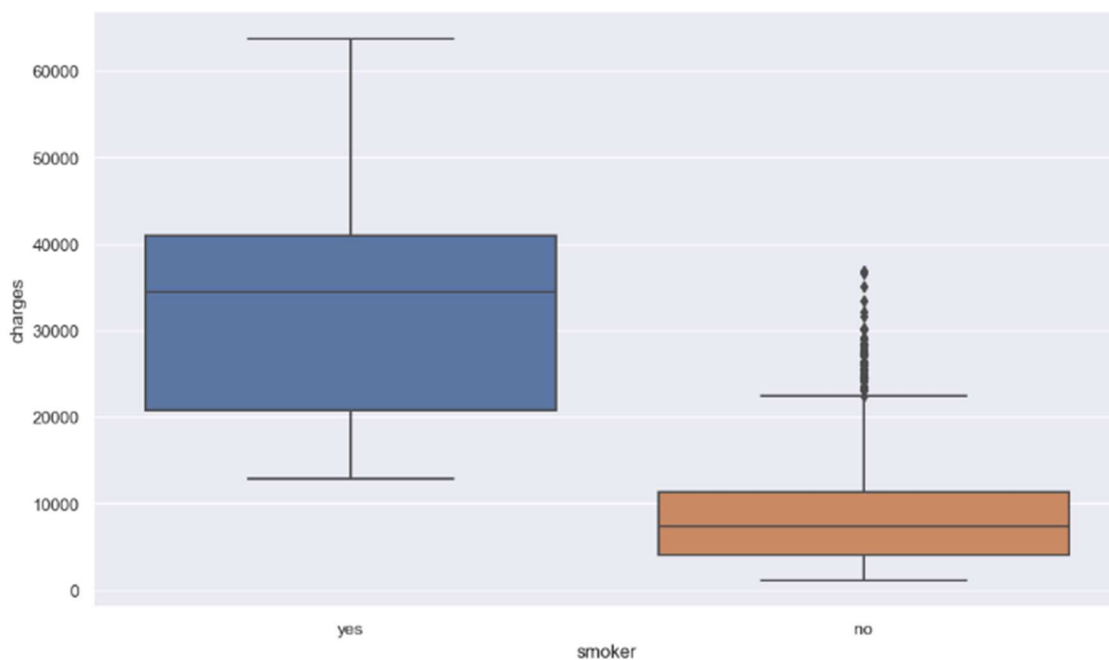
“MediClaim” Policy Analysis

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Objective: Review policyholder data to identify main drivers of their charges by looking at smoking status, sex, BMI and region.

Findings and Recommendations

I. Smokers versus Nonsmokers

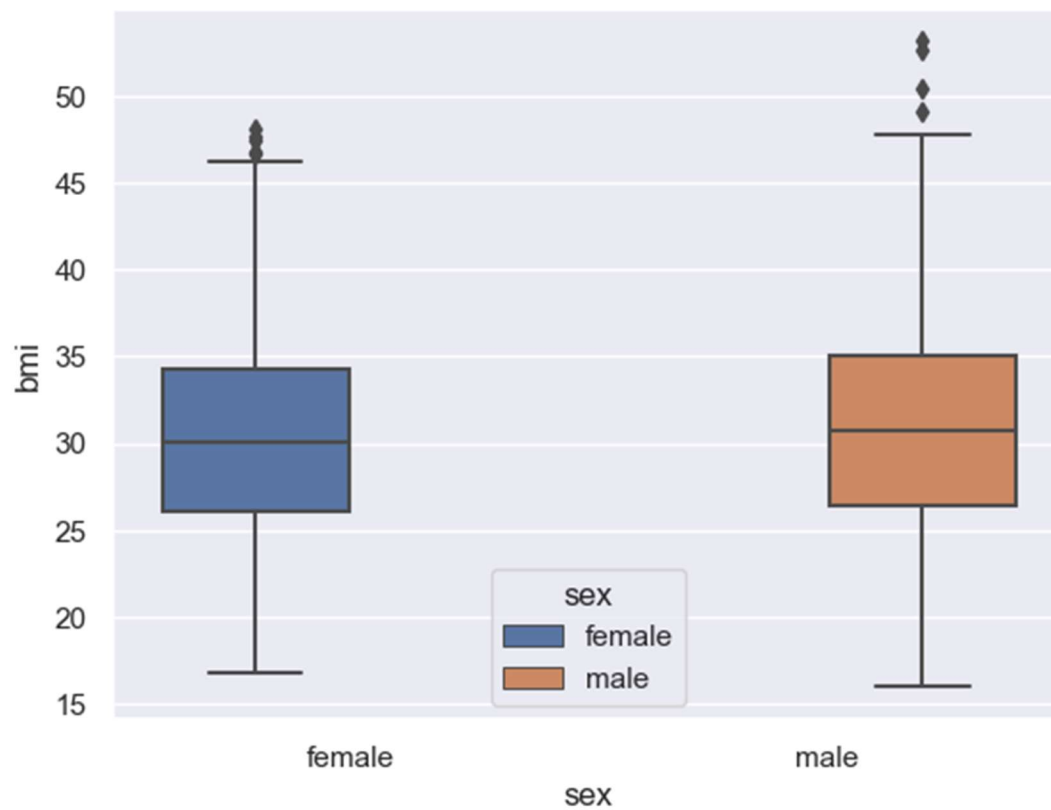


Medical claims by smokers are higher than for nonsmokers. Supported by a p-value of 2.94×10^{-103} .

- ❖ If not already in place, higher premiums should be charged to smokers to offset the additional cost they create.

*A significance level of 0.05 was used in all testing.

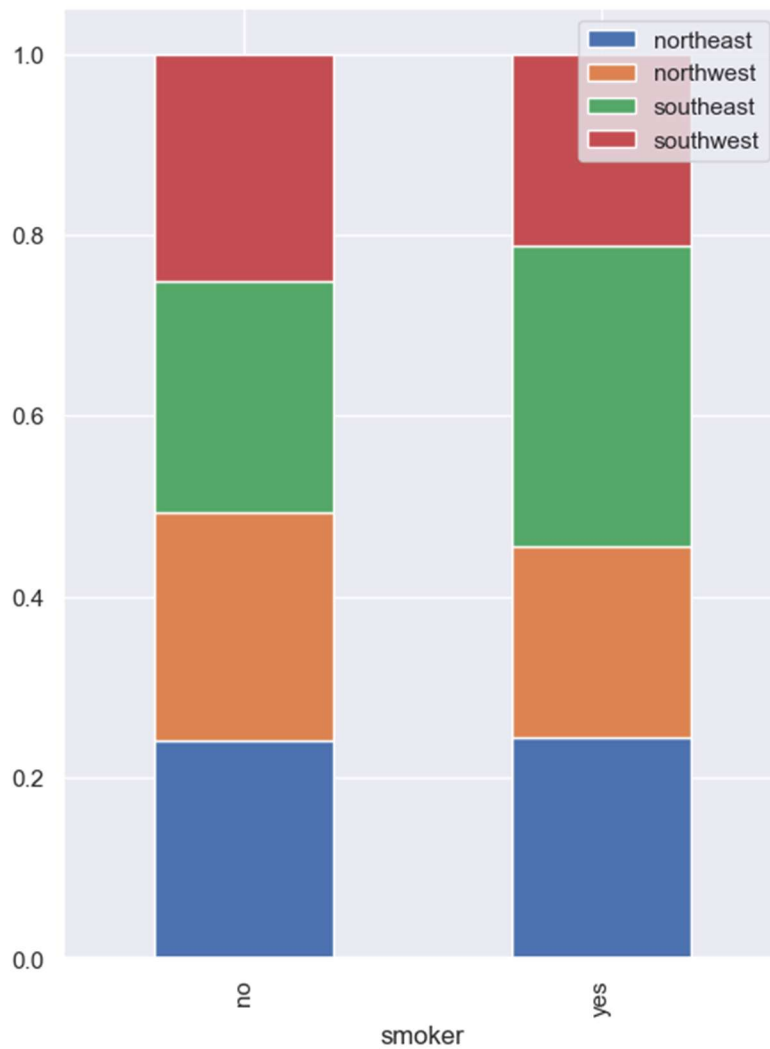
II. BMI comparison between females and males.



BMI does not differ between females and males.

- ❖ BMI would not be a basis to set policy rates differently by sex. A p-value of 0.089 supports this conclusion.

III. Smoking habits by region.

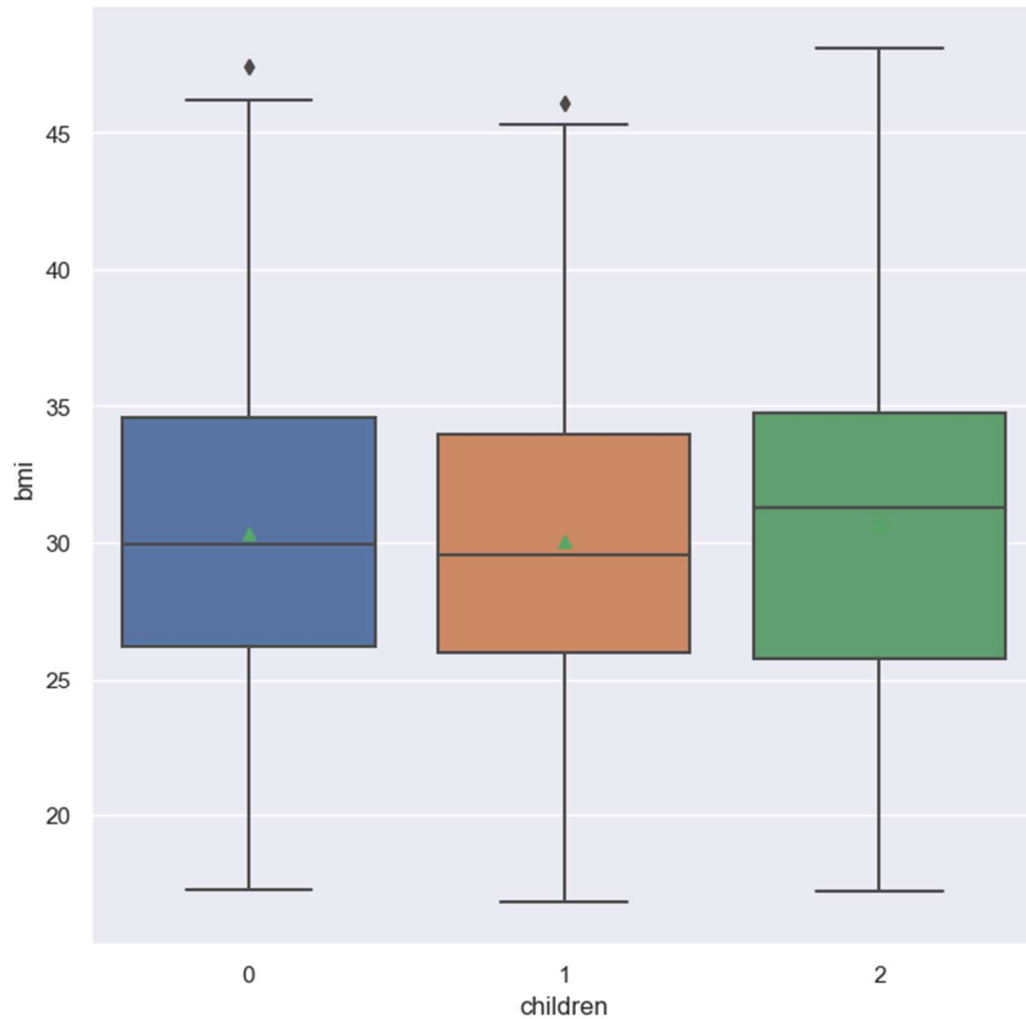


Smoking habits are not determined by region.

- ❖ Planning differently at the regional level based on smoker status is not necessary. Smokers and nonsmokers are approximately evenly split (about 25%) across four regions. A p-value of 0.06 in testing supports this conclusion.

*A significance level of 0.05 was used in all testing.

iv. Women's BMI based on number of children (between zero to two children)



Women who have between zero to two children do not have a difference in mean BMI.

- ❖ While there are some small differences in the data, there is no significant difference in the mean BMI for women who have no children, one child or two children. A p-value of 0.715 supports this finding.

*A significance level of 0.05 was used in all testing.