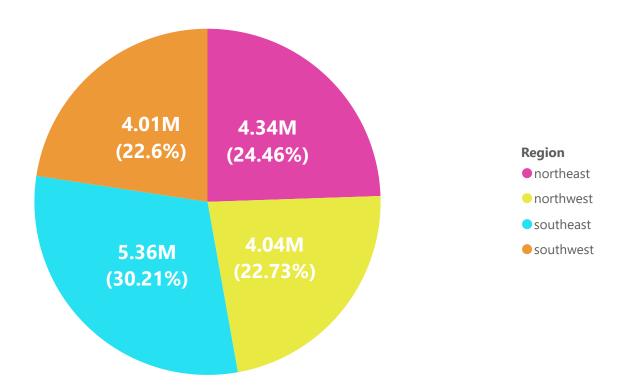
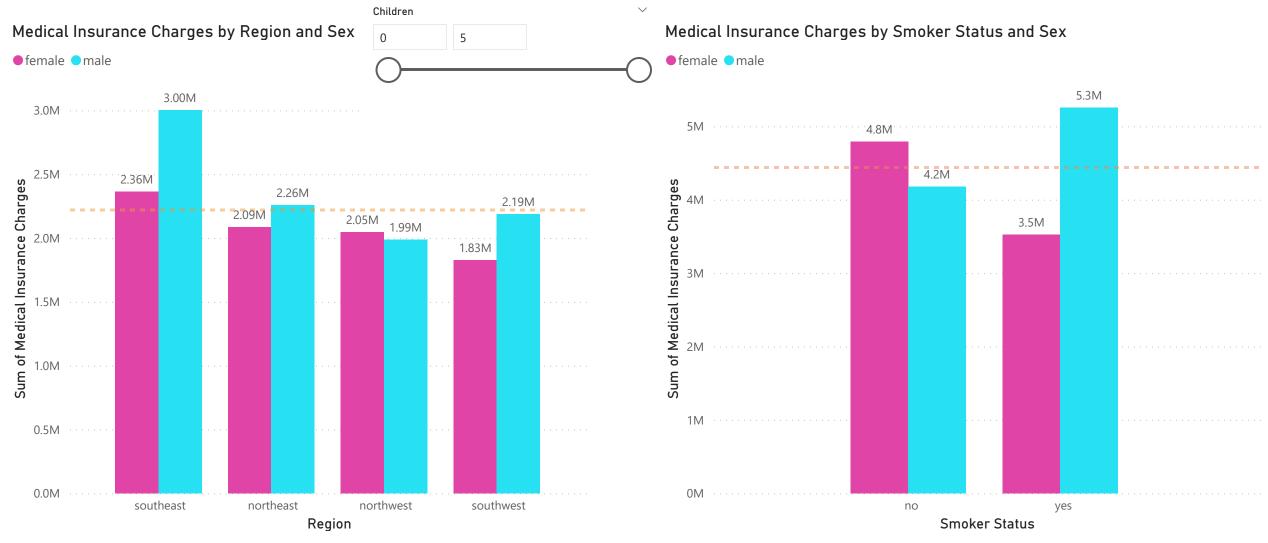


This graph shows there is a positive correlation between the age of a person claiming medical insurance and the average BMI, however, it's only a moderate relationship with the R value being 0.6 and the model does not account for the variation in the data as the R<sup>2</sup> value is 0.37.

## Sum of Medical Insurance Charges by Region



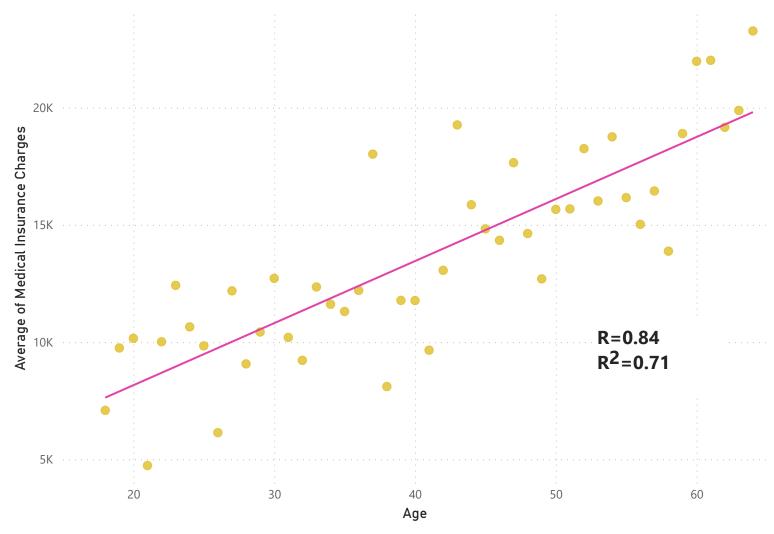
The pie chart shows that >50% of the total medical insurance costs are incurred in the South with the most costly region being the Southeast ( $\sim30\%$ ). The Northwest and Southwest are equally the lowest at  $\sim22\%$  each.



This graph shows medical insurance charges in each region and the split by sex. Overall, the Southeast region has the highest costs with both male and females being above average (males higher than females). The Northwest is the region with the lowest burden overall however, the Southwest female subset has the total lowest cost.

This graph shows medical insurance charges split by smoker status and sex. Male smokers have the overall highest cost out of all the subsets (above average) while female smokers have the overall lowest cost (below average). For non-smokers, females incur higher costs (above average) than males (below average).

## Average of Medical Insurance Charges by Age



This graph shows there is a strong positive correlation between the age of a person and their average medical insurance costs, indicated by the R value of 0.84. This model also explains a large amount of the variation in the data as the R<sup>2</sup> value is 0.71.