

Factors that Impact the Cost of Medical Insurance Charges

by Mikaela Connell



Personal Attributes Analyzed

AGE

SEX

BMI

FAMILY
SIZE

SMOKING
HABITS

REGION

Business Problem

Business Problem:

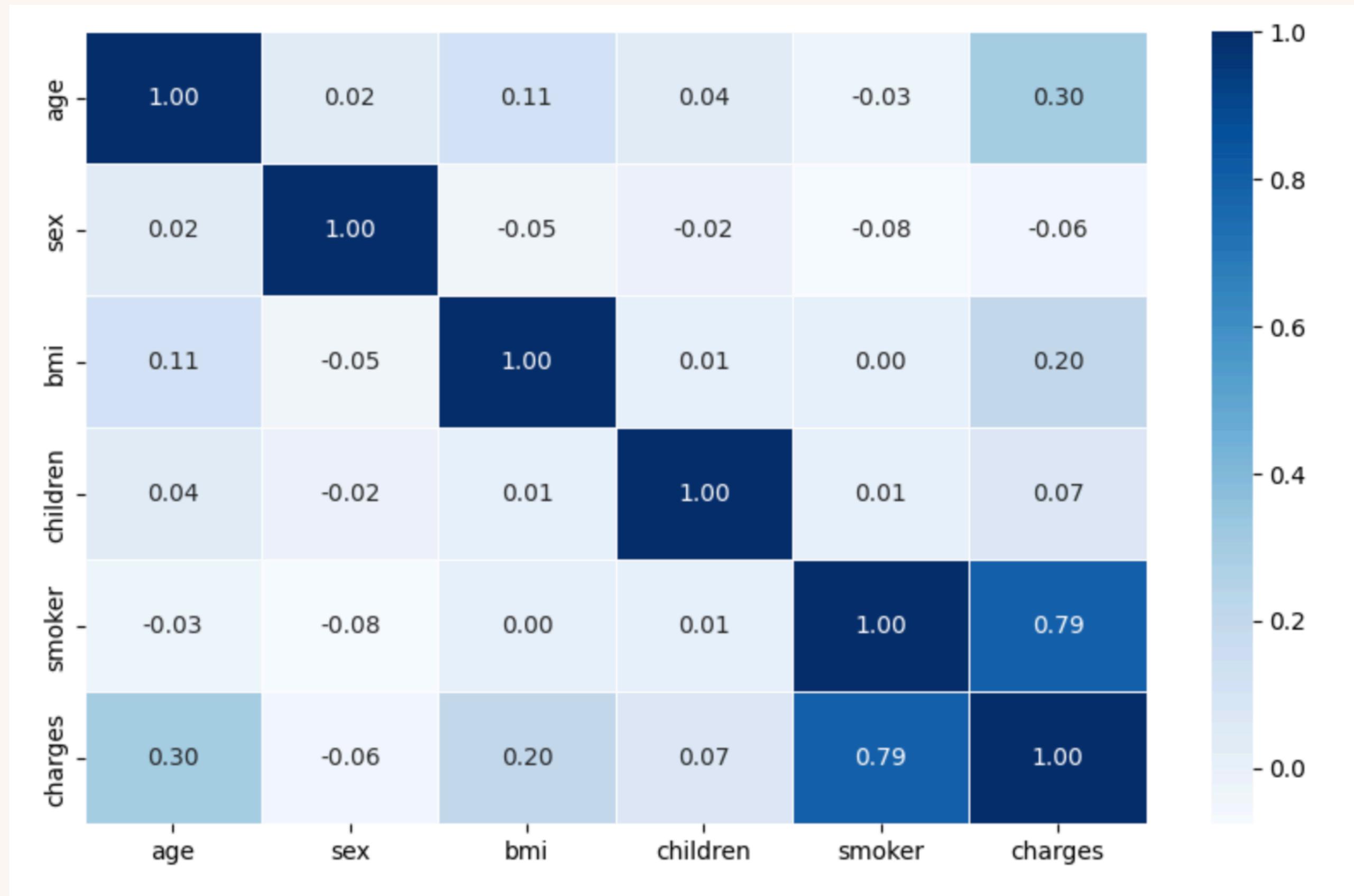
- *Individuals* in the US facing increased medical costs
- *Insurance companies* looking to predict which individuals are more likely to have higher costs

Solution: Examine the type of attributes individuals with different levels of spend to determine which groups of people to target

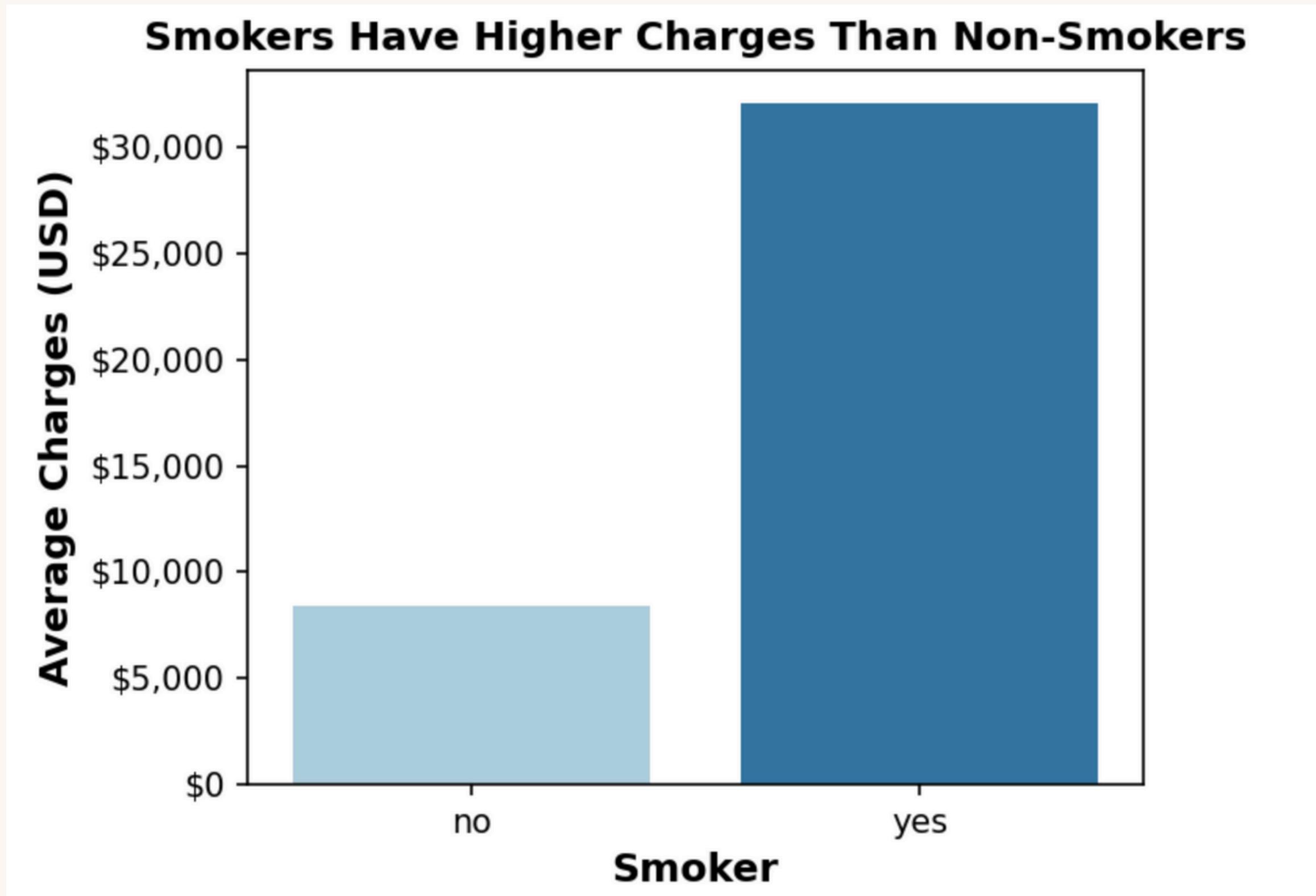
Constraints: This dataset has a limited amount of data, i.e. does not contain time-wise data



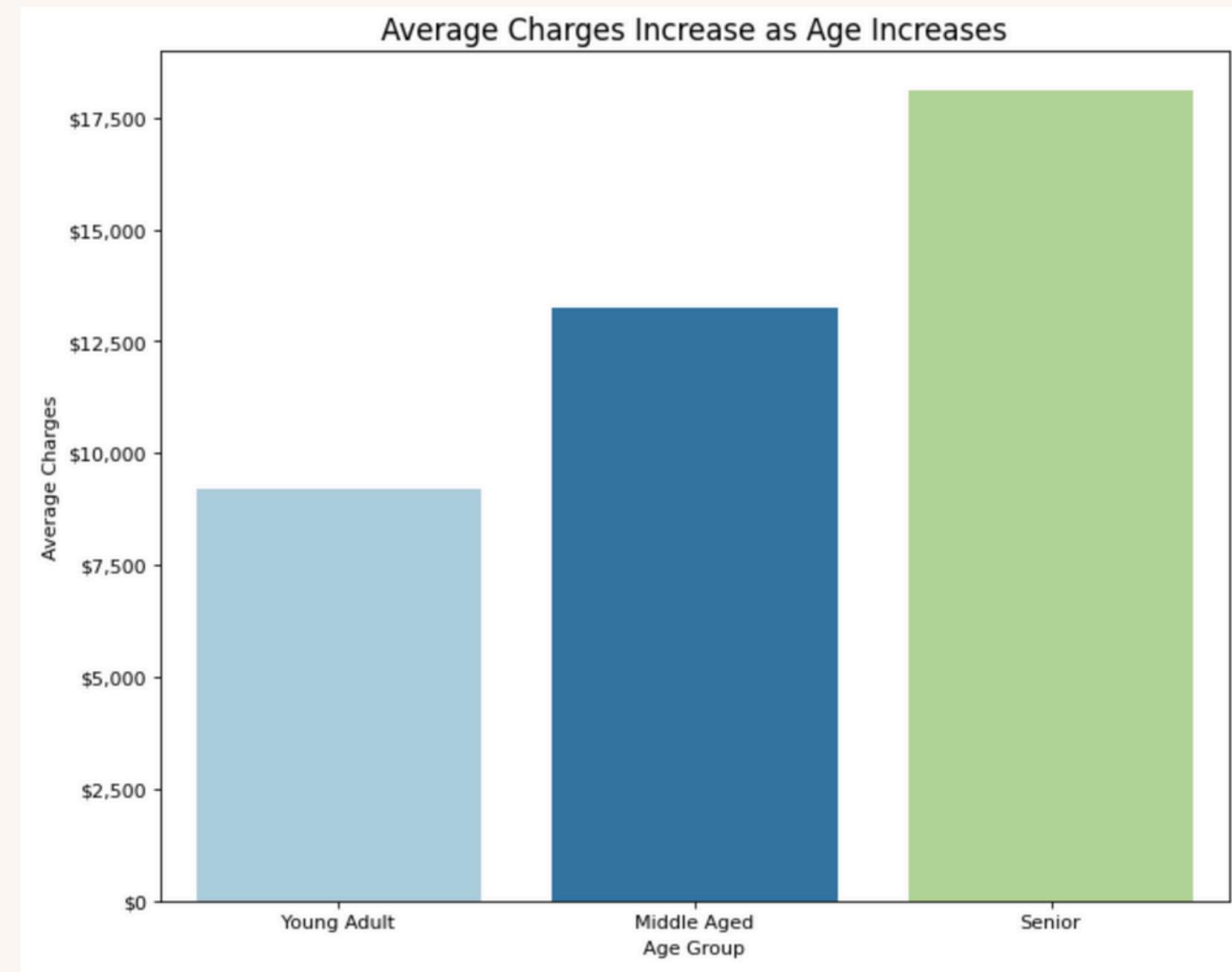
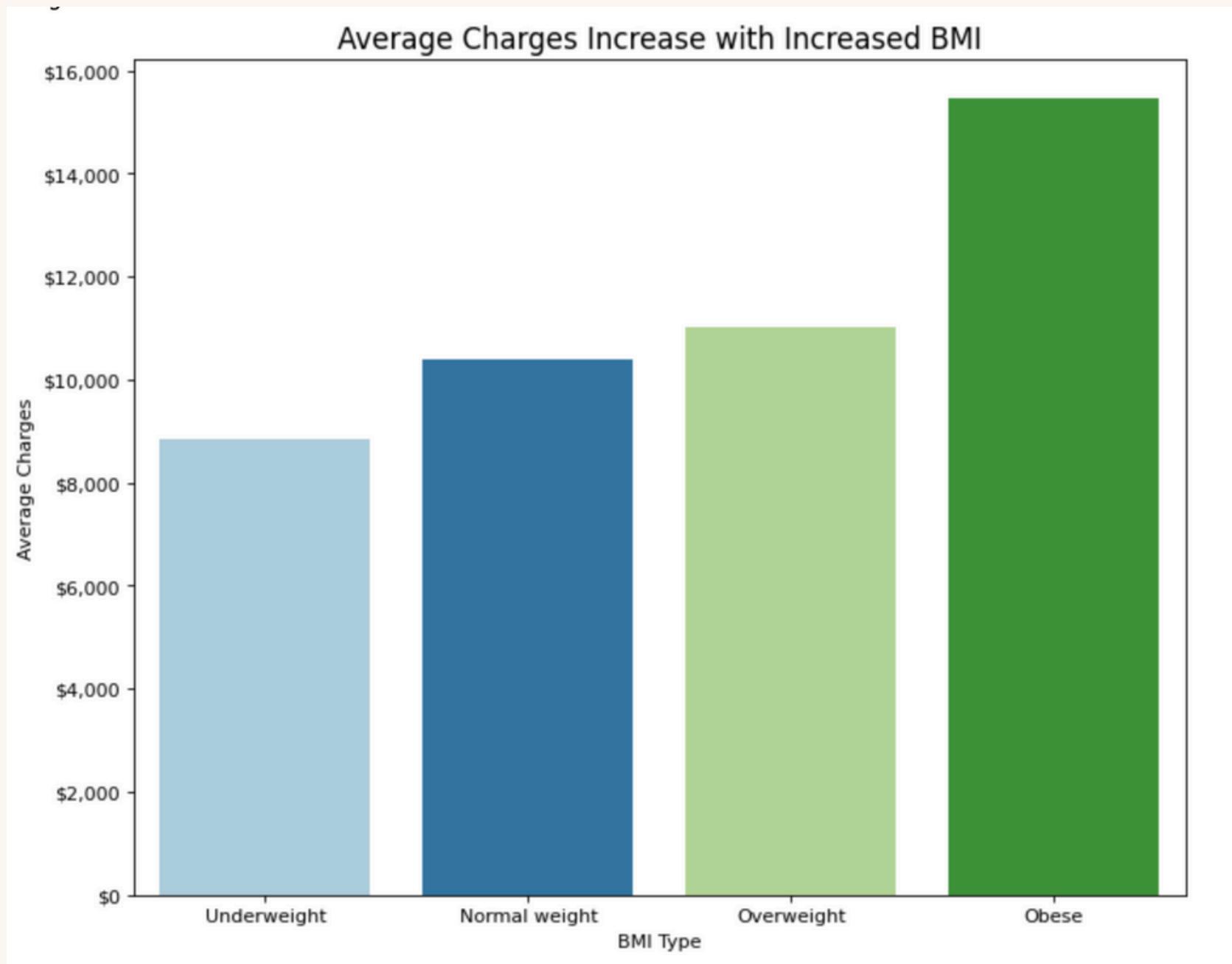
Correlation Heatmap



Smokers vs. Non-Smokers



BMI Types & Age Groups



Summary

- Individuals in the US that identify as smokers, have a BMI>30, or age>50, on average, are shown to have higher incurred charges compared to individuals who are non-smokers, have lower BMI or younger age.
- Region, number of children, and sex did not have a strong correlation with the amount of charges incurred.

