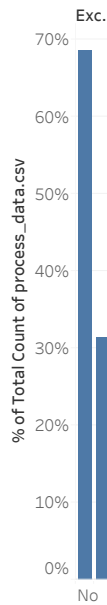


freq  
his-  
togram  
of ex-  
cessive  
charges

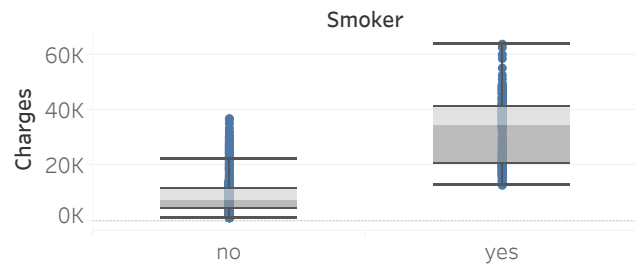


% of Total  
Count of pro-  
cess\_data.csv  
for each  
Excess  
charges. The  
data is  
filtered on  
Smoker, Age  
and Bmi. The  
Smoker filter  
keeps no and  
yes. The Age  
filter ranges  
from 18 to 64.  
The Bmi filter  
ranges from  
16 to 53.1 and  
keeps Null  
values. The  
view is  
filtered on  
Excess  
charges,  
which keeps  
No and Yes.

## Exploratory Data An..

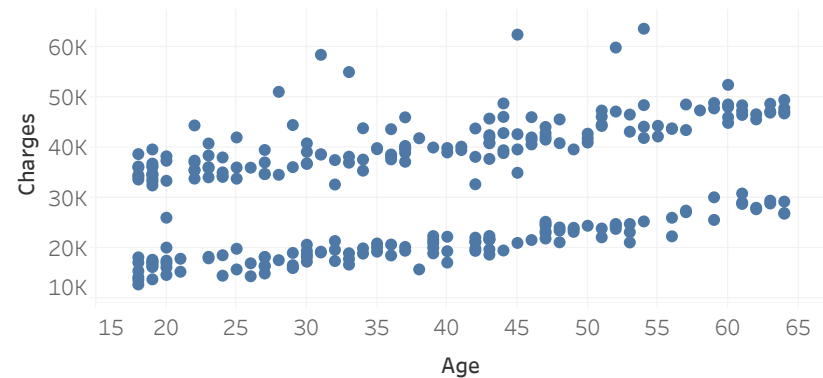
To explore this dataset the question to explore will be how unhealthy factors such as smoking and unhealthy bmi effect t..

### Box plot smoker

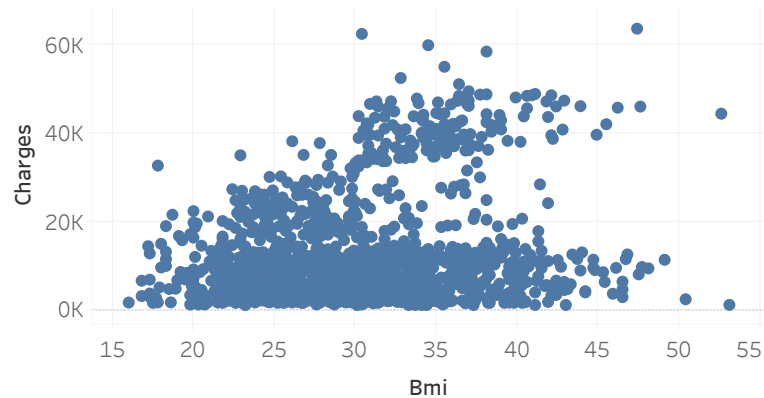


The distributions for the smokers along with the box plot points towards these being the largest factor in determining the charges for an individual. The box plots median is higher for s..

### distrubution of charges for smokers

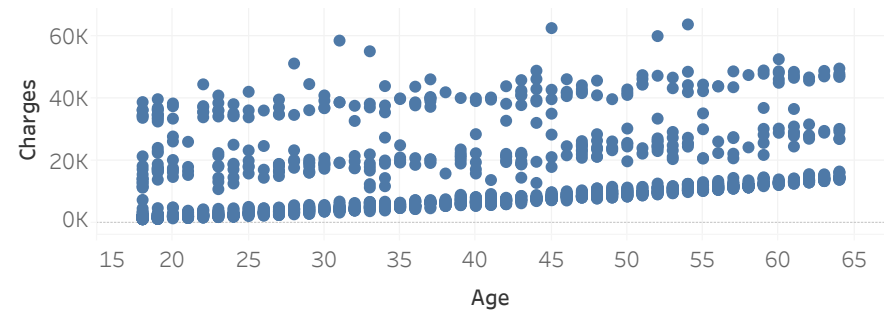


### BMI distrubution

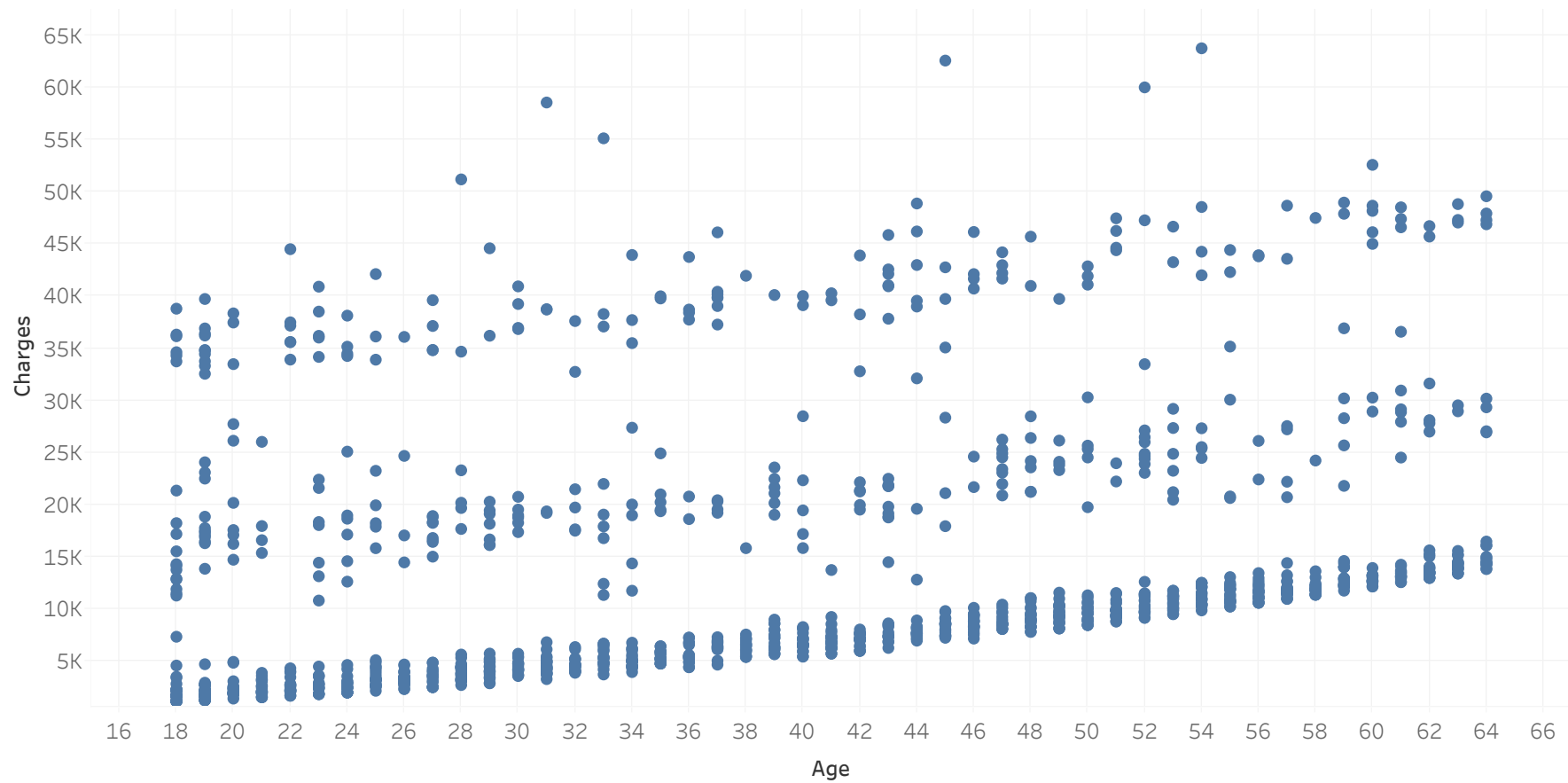


The distrubution for BMI shows little correlation for charges so It wouldnt lo..

### Distribution of charges

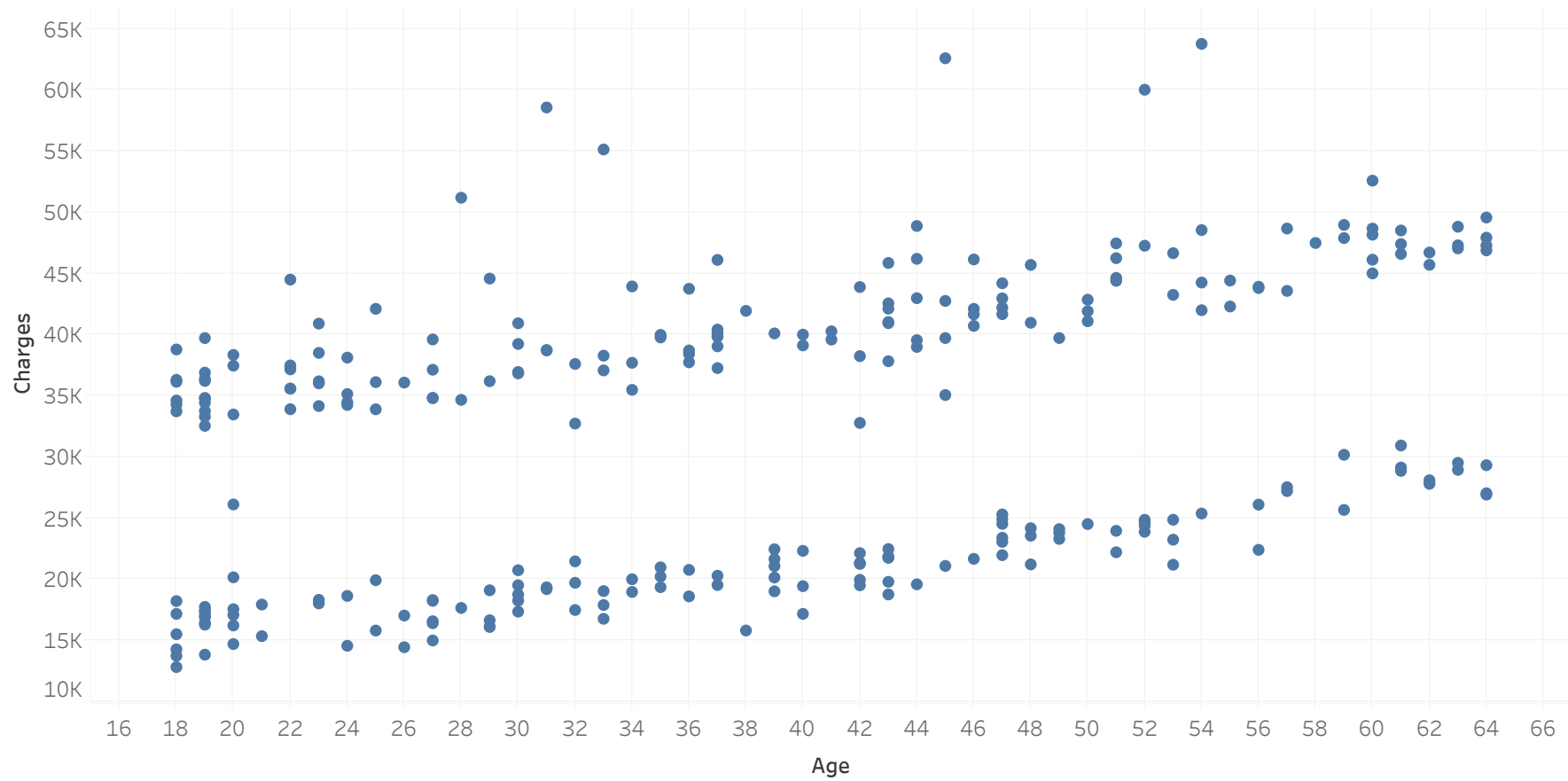


## Distribution of charges



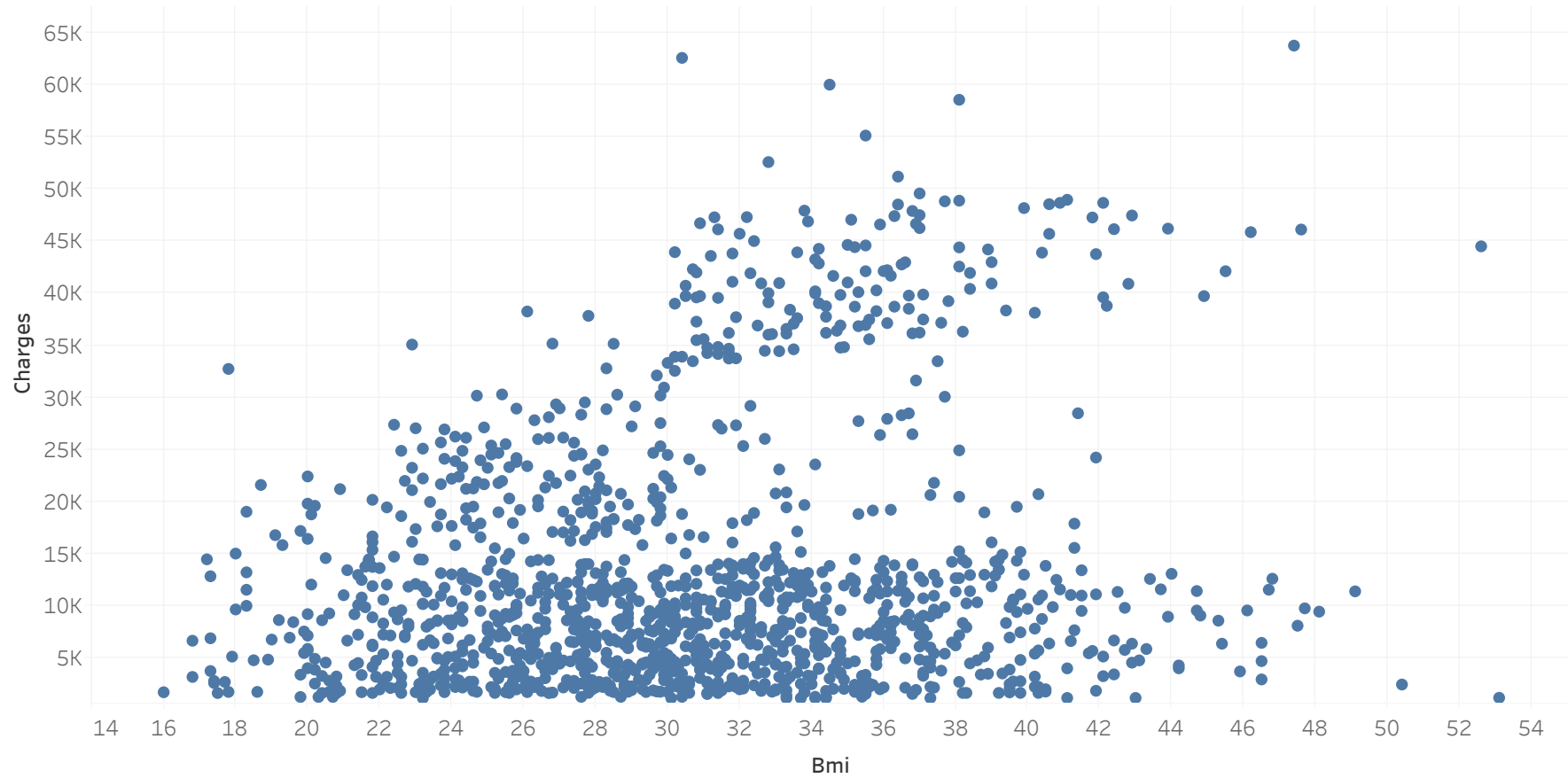
Age vs. Charges. The data is filtered on Smoker, Bmi, Excess charges, Action (Charges,Smoker) and Action (Excess charges). The Smoker filter keeps no and yes. The Bmi filter ranges from 16 to 53.1 and keeps Null values. The Excess charges filter keeps No and Yes. The Action (Charges,Smoker) filter keeps 1,337 members. The Action (Excess charges) filter keeps 2 members. The view is filtered on Age, which ranges from 18 to 64.

## distrubution of charges for smokers



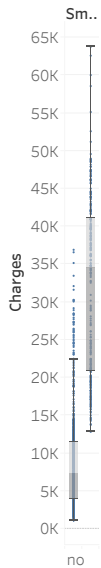
Age vs. Charges. The data is filtered on Smoker (process\_data), which keeps no and yes.

## BMI distrubution



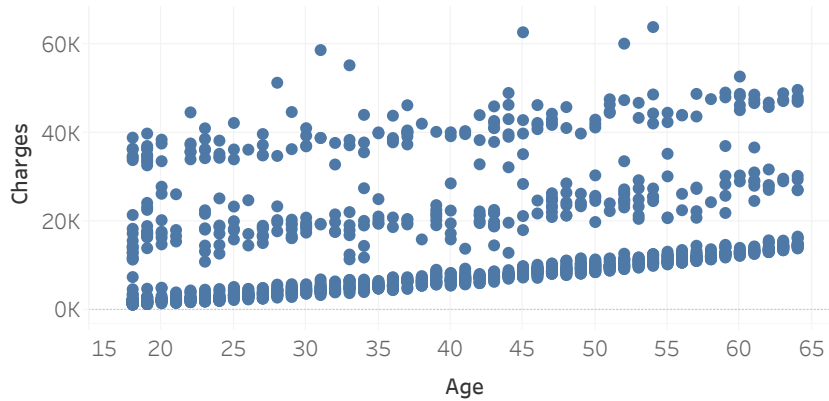
Bmi vs. Charges. The data is filtered on Smoker, Age, Excess charges, Action (Charges,Smoker) and Action (Excess charges). The Smoker filter keeps no and yes. The Age filter ranges from 18 to 64. The Excess charges filter keeps No and Yes. The Action (Charges,Smoker) filter keeps 1,337 members. The Action (Excess charges) filter keeps 2 members. The view is filtered on Bmi, which ranges from 16.00 to 53.10 and keeps Null values.

Box  
plot  
smoker



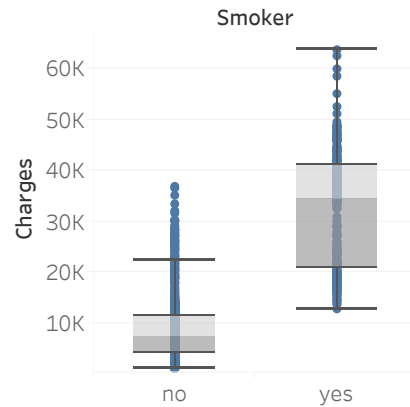
Charges for each Smoker. Details are shown for Smoker. The data is filtered on Age, Bmi, Excess charges and Action (Excess charges). The Age filter ranges from 18 to 64. The Bmi filter ranges from 16 to 53.1 and keeps Null values. The Excess charges filter keeps No and Yes. The Action (Excess charges) filter keeps 2 members. The view is filtered on Smoker, which keeps no and yes.

## Distribution of charges



Using this dashboard we can see that age does have a contributing factor to the likelihood of excess charges and the distribution of them however this is not part of the research question. To explore the question we look at the bmi and how a excessive or under average bmi effects the excess charges and the distribution and how somking effects the same factors as well. using the filters it is clear to see that smoking the the dominat factor in this regard with only 1 smoker not experiencing excessive charges and even then this person is 18 so theyre unlikely ti experi..

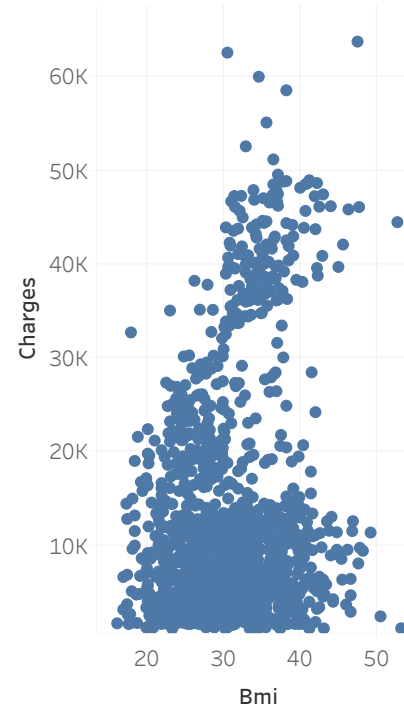
## Box plot smoker



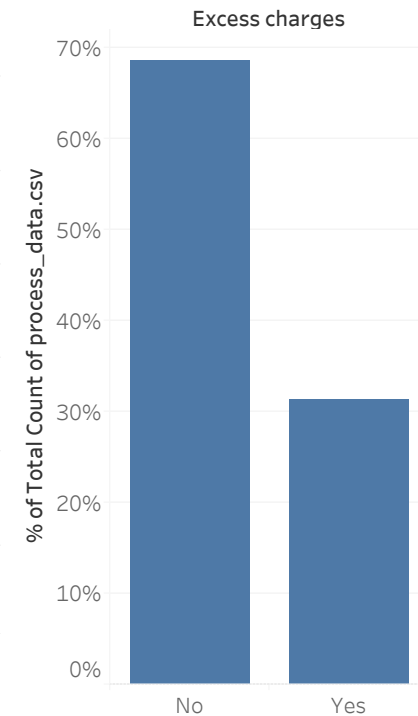
## Research question

In this dashboard we will visualize our findings from our analysis in milestone 2. Our question was how unhealthy lifestyles such as smoking or unhealthy bmi effect the charges of an individual and the severity of them

## BMI distrubution



## freq plot



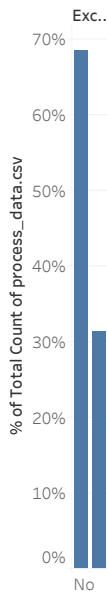
Age  
18 to 64

Bmi  
16 to 53.1  
and Null values

Smoker  
☒ no  
☒ yes

Excess charges  
☒ No  
☒ Yes

freq  
plot



% of Total Count of process\_data.csv for each Excess charges. The data is filtered on Smoker, Age, Bmi and Action (Charges,Smoker). The Smoker filter keeps no and yes. The Age filter ranges from 18 to 64. The Bmi filter ranges from 16 to 53.1 and keeps Null values. The Action (Charges,Smoker) filter keeps 1,337 members. The view is filtered on Excess charges, which keeps No and Yes.