

Lab_03

Fantastic Four

guiding question

In this report we want to find the relationship between people who have smoked at least 100 cigarettes in their life and how it can affect their general health, their health plan coverage, their weight, and frequency of exercise. This report will also reveal the likelihood of people of different ages to have smoked at least 100 cigarettes.

answer to the guiding question

including the plot

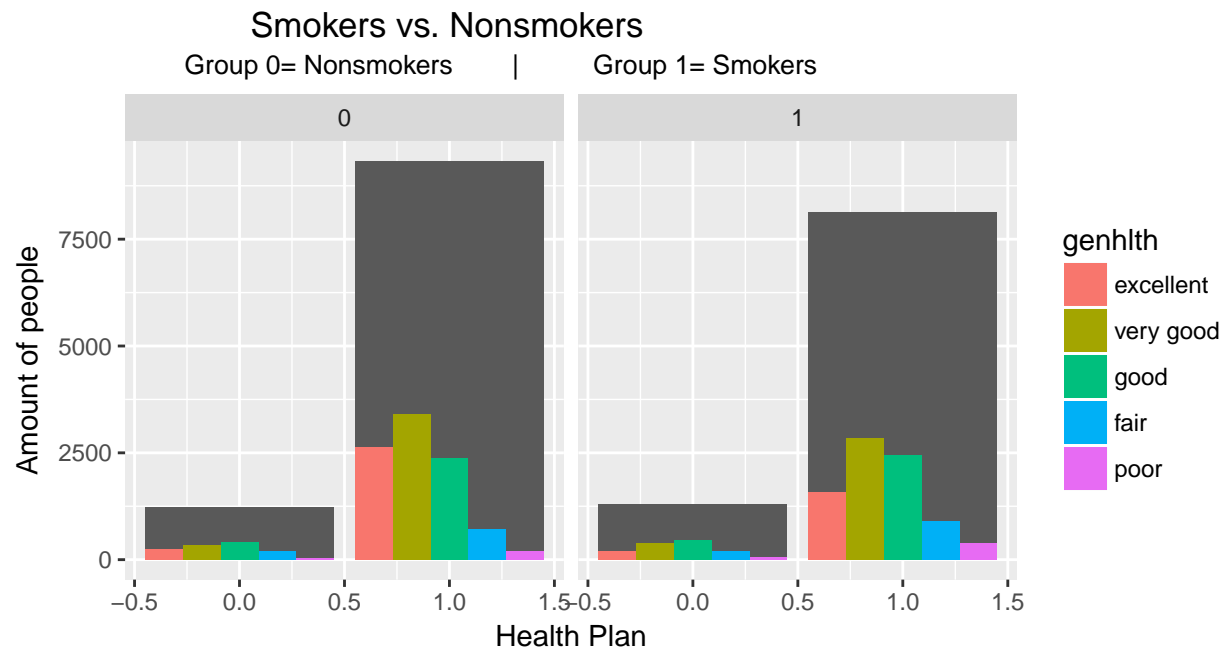
Recommendation

letter to the CDC, or argument of similar nature

Individual Findings

Lexie Marinelli

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# someone can take this part, I decided to adjust a little: ggplot(data= cdc, mapping =aes(x=age, y=hlthplan))  
ggplot(data= cdc)+ stat_count(mapping= aes(x=hlthplan)) + facet_grid(~smoke100) +geom_bar(mapping= aes(x=age, y=hlthplan))
```



This graph portrays that nonsmokers have a higher amount of people in excellent and very good health as well as having a lower amount of people with fair and poor health. This graph also shows that the majority of people, in general, have health insurance not depending on whether they smoke or not. Smokers do have a lower amount of people who have a health plan, but not by a significant amount. The main difference between the smokers and nonsmokers is the general health distribution among the individuals, nonsmokers having a higher amount in the upper quadrant and a lower amount of people in the lower quadrant compared to people who have smoked at least 100 cigarettes.

Lindsay Gettel

Zhenlong Li

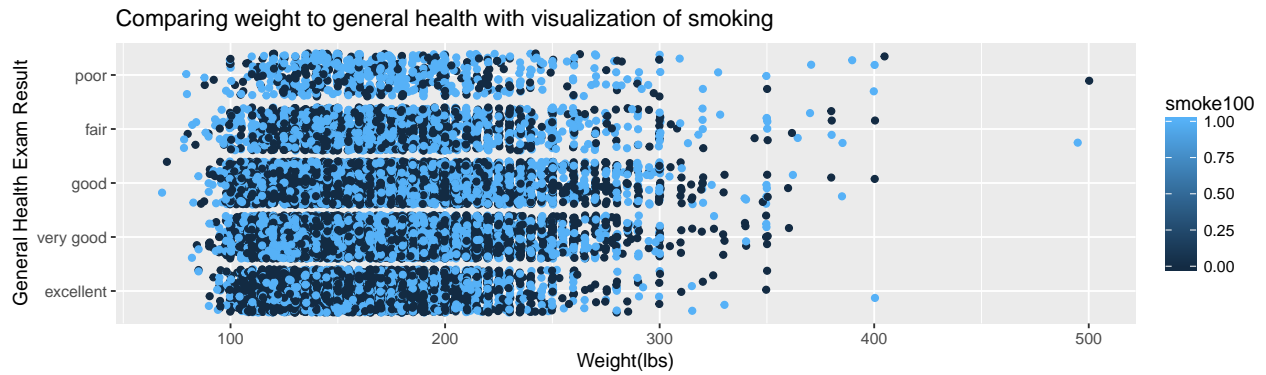
Scott Baker

The three following graphs are similarly composed but I found them to be visually appealing to me using the jitter function and a color function with another variable.

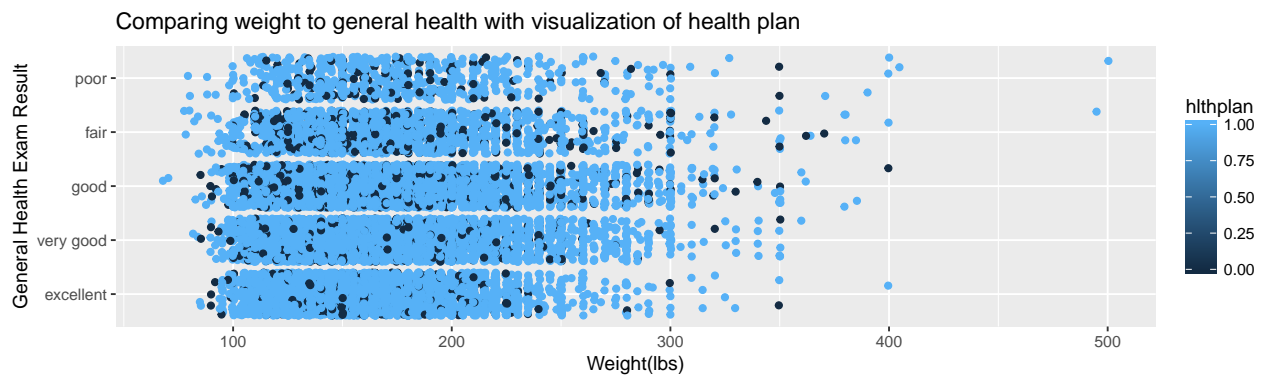
Here are my general findings, which tend to follow intuition:

- There is a larger density of people who smoke that result in 'poor' health
- There is a smaller density of people who are in 'poor' health and have a health plan
- It is more likely that older people have poor health compared to younger people
- In general, there are more people who weight more in the 'poor' health category

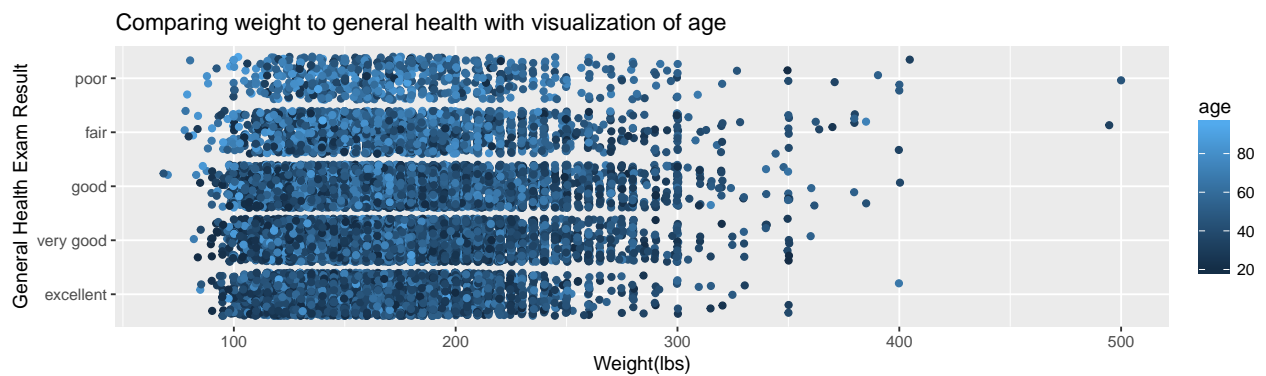
The following graph shows that there is a general increase in people who smoke and their general health exam—more light blue dots compared to dark blue dots where the person's health is considered 'poor':



The following plot shows that there is a slight decrease in dark blue dots (no health plan) as the general health exam result gets worse.



The following graph shows that there is a decrease in health exam result as age goes up—fewer darker dots in the ‘poor’ category than in the ‘excellent’ category.



Contributions