

## **STA413 Data Analysis Assignment Group2(TEAM ALPHA) Report**

### **Team Members And Contribution**

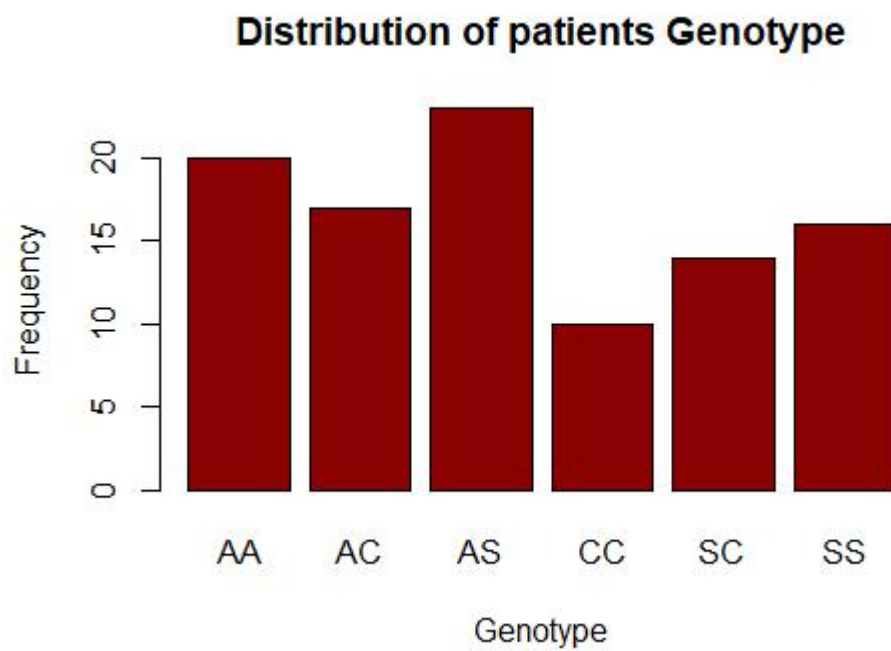
<b>Amoo Barakat</b>	Simulated Data In R
<b>Edet Mercy</b>	Computed Descriptives statistics In R
<b>Dada Israel</b>	Generated Insights from Data
<b>Olusayo Moses</b>	Visualized the Data
<b>Oluyomi Stephen</b>	Designed the Report

This report contains the analysis and insight generated from a simulated data(patients-data) of a fictional hospital. Appropriate graphs/plots are used to examine the distribution of the variables and communicate our findings about the data overall.

A full version of the analysis consisting the plots, visualization used, source code and this report is available on github.

Data: patients-data

Source code: [www.github.com/STA413-data-analysis/patients-data](https://www.github.com/STA413-data-analysis/patients-data)

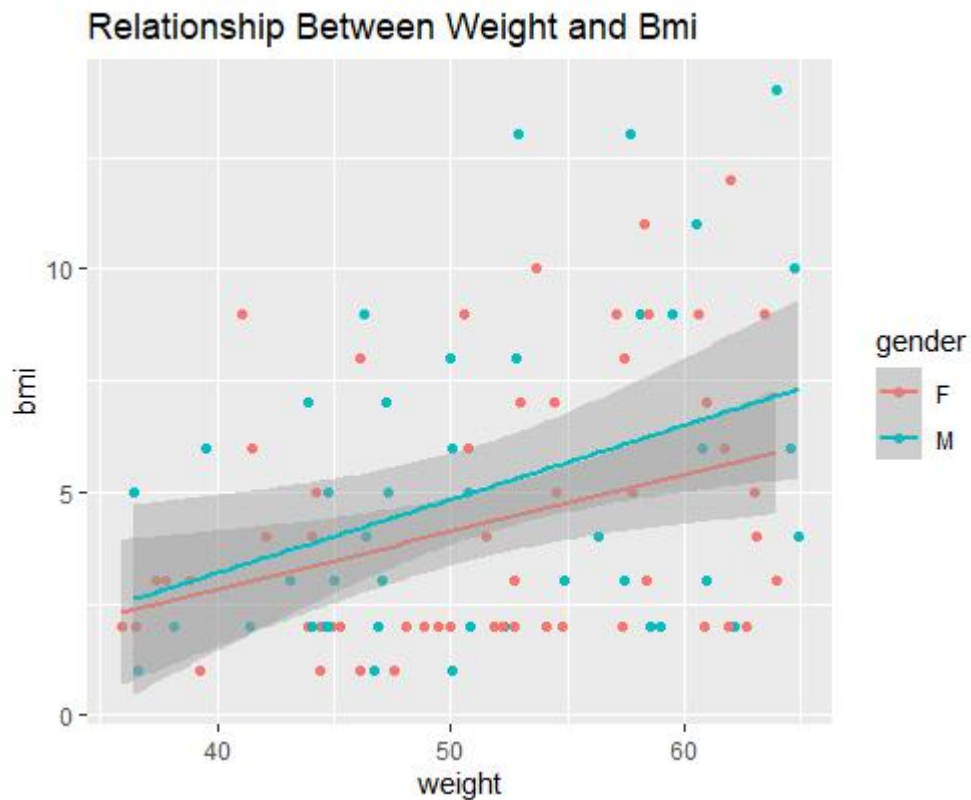


Observations:

- Most patients have an AS genotype.
- Few patients have a genotype of type CC.

Conclusion:

- Patients how use this hospital have genotype AS.

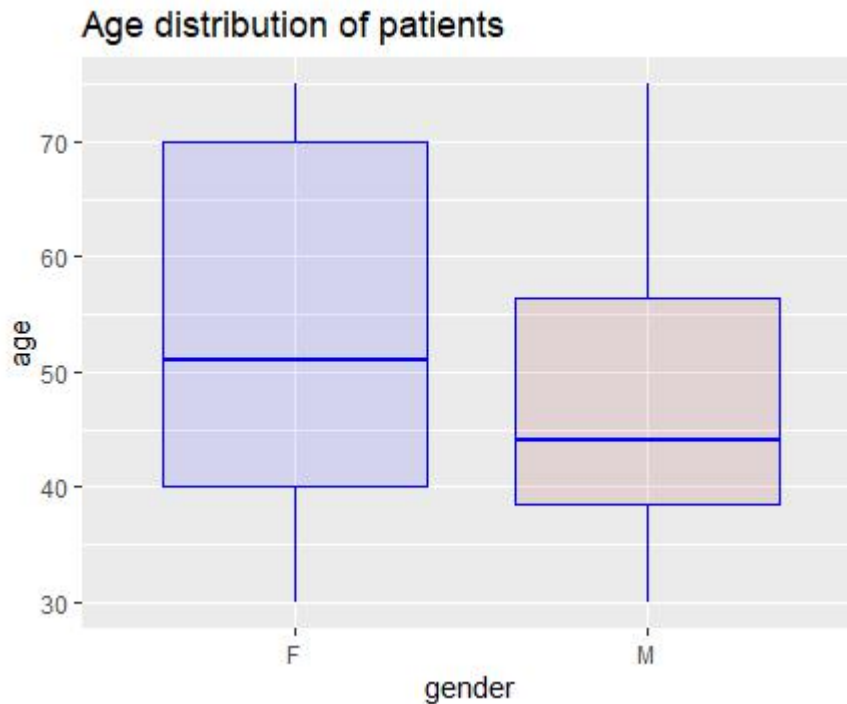


#### Observations:

- There is a positive relationship between weight and Bmi.
- The positive relationship between weight and Bmi in Males is much stronger than that of the Females.

#### Conclusion:

- Males Bmi tend to go up as they gain weight compared to Females.



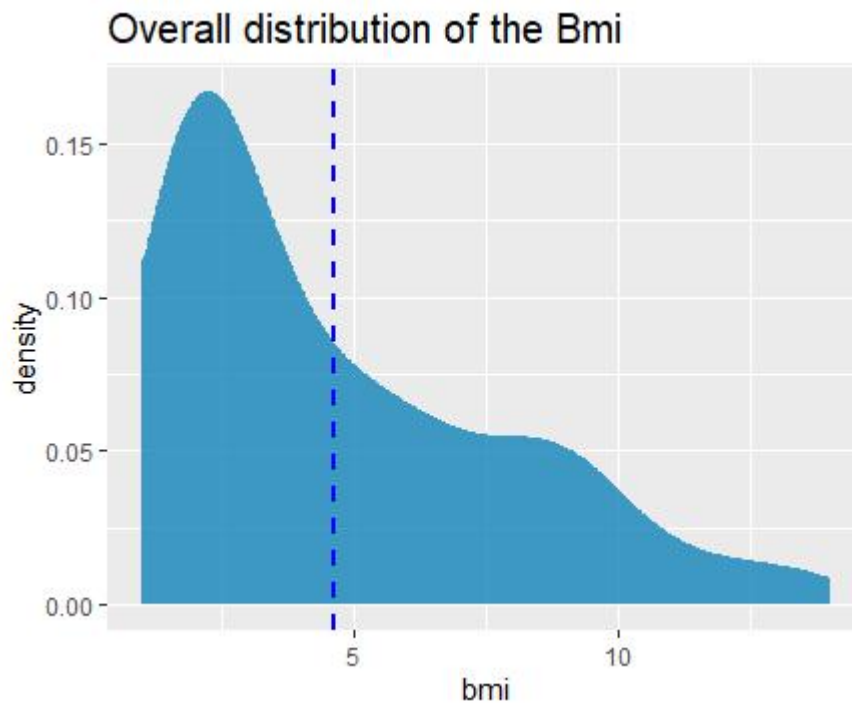
#### Observations:

- No patient is less than 30 years of age for both categories.
- There are more Male patients than Female patients in the hospital.
- At least 75% of the Male patients are 40 years or older.
- At least 75% of the Female patients are 40 years or older.

#### Conclusion:

- Males Bmi tend to go up as they gain weight compared to Females.

```
Console Terminal Jobs
R 4.1.2 - C:/Users/ste_o/Desktop/STA413OLUYOIMI/TeamAlpha/
> summary(hospital$age)
  Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
 30.00  39.00  48.00  50.76  63.25  75.00
>
```



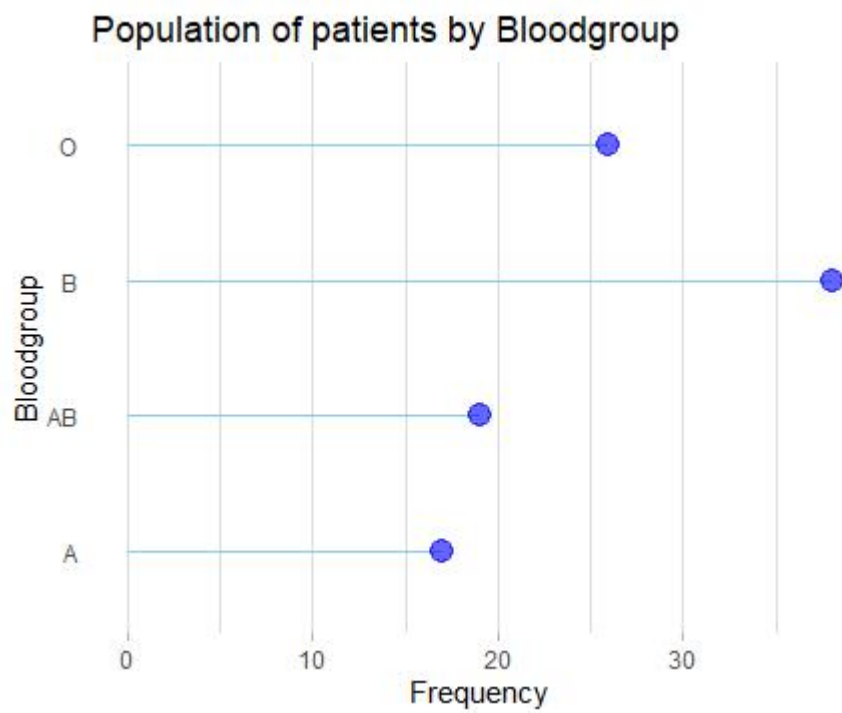
#### Observations:

- The overall Bmi of patients follows a chi square distribution.
- It's positive skewed.
- Overall average bmi of the patients is less than 5.

#### Conclusion:

- Males Bmi tend to go up as they gain weight compared to Females.

```
Source
Console Terminal Jobs
R 4.1.2 - C:/Users/ste_o/Desktop/STA413OLUYOMI/TeamAlpha/
> summary(hospital$bmi)
  Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
  1.00   2.00   3.00   4.61   7.00   14.00
```



Observations:

- Most patients belong to the B blood type.