Metabolic Syndrome

Luz Dobbins

What is Metabolic Syndrome?

This is a cluster of conditions that can show a predisposition of diseases that can be managed but have not been cured, yet.

- Diabetes

- Heart Attack

- Stroke

Factors

Some factors are things that you can see on social media: marital status, race, sex, age, and income.
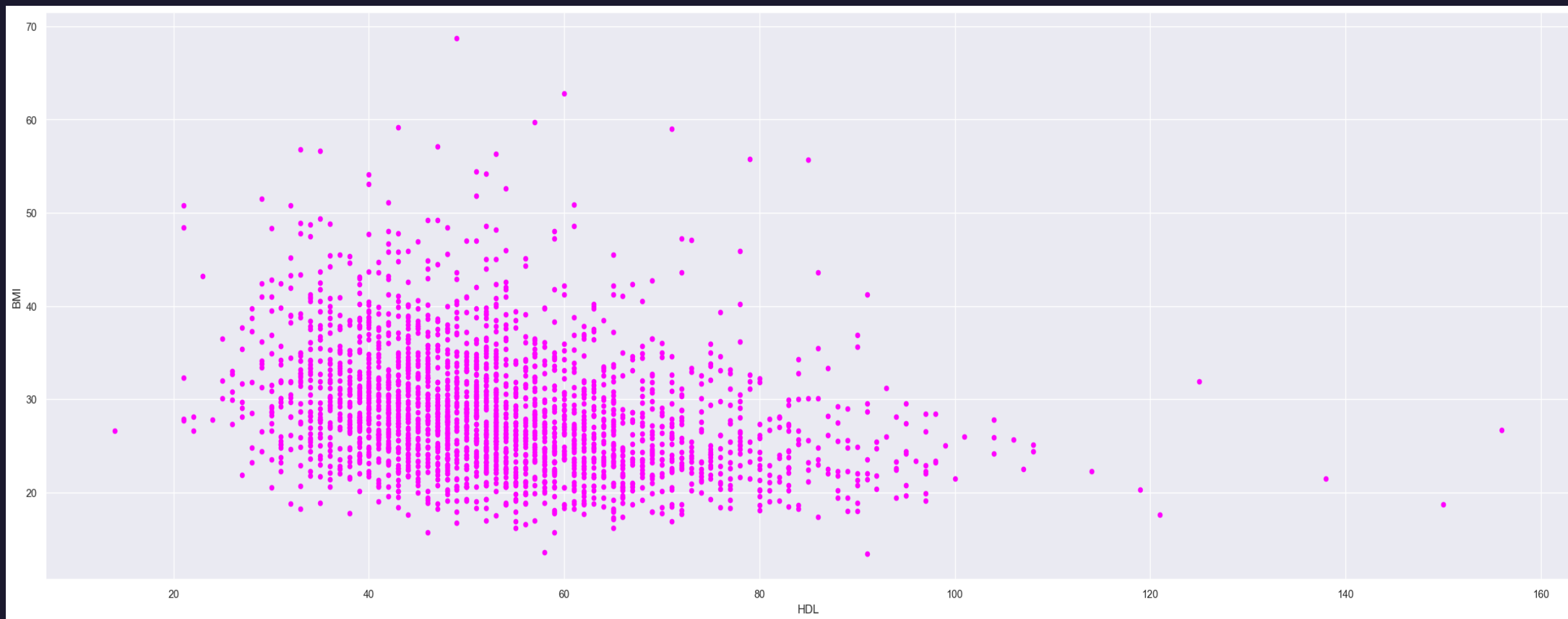
It also has medical information like BMI, waist circumference, and blood work results testing like a Lipid profile test and a Blood Glucose test.
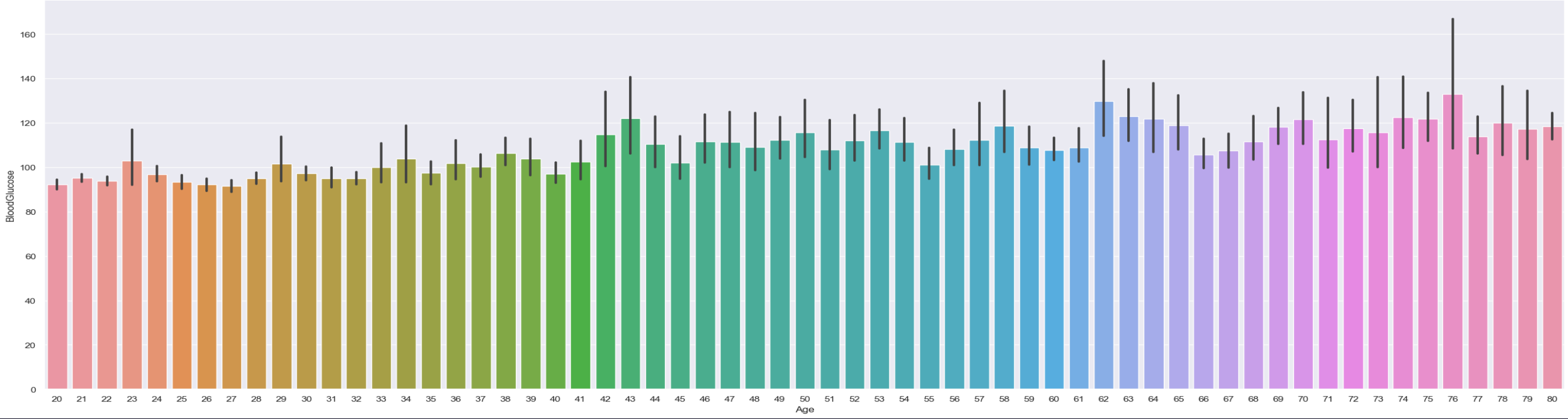

Sex   Age   Differences

BODY MASS INDEX

Correlation Map

BMI and HDL

Blood Glucose by patient's age

Category	Fasting value		Post prandial / aka post meal
	Minimum	Maximum	2 hours after meal
Normal	70 mg/dl	99 mg/dl	Less than 140 mg/dl
	4 mmol/l	6 mmol/l	Less than 7.8 mmol/l
Pre-diabetes	100 mg/dl	125 mg/dl	140-199 mg/dl
	6.1 mmol/l	6.9 mmol/l	7.8-11 mmol/l
Diabetes	More than 126 mg/dl		More than 200
	More than 7 mmol/l		More than 11.1 mmol/l

XGBoost Classifier

The best model for this project was the eXtreme Gradient Boosting.

88% accuracy score

Confusion Matrix shows the best presentation of this dataset.
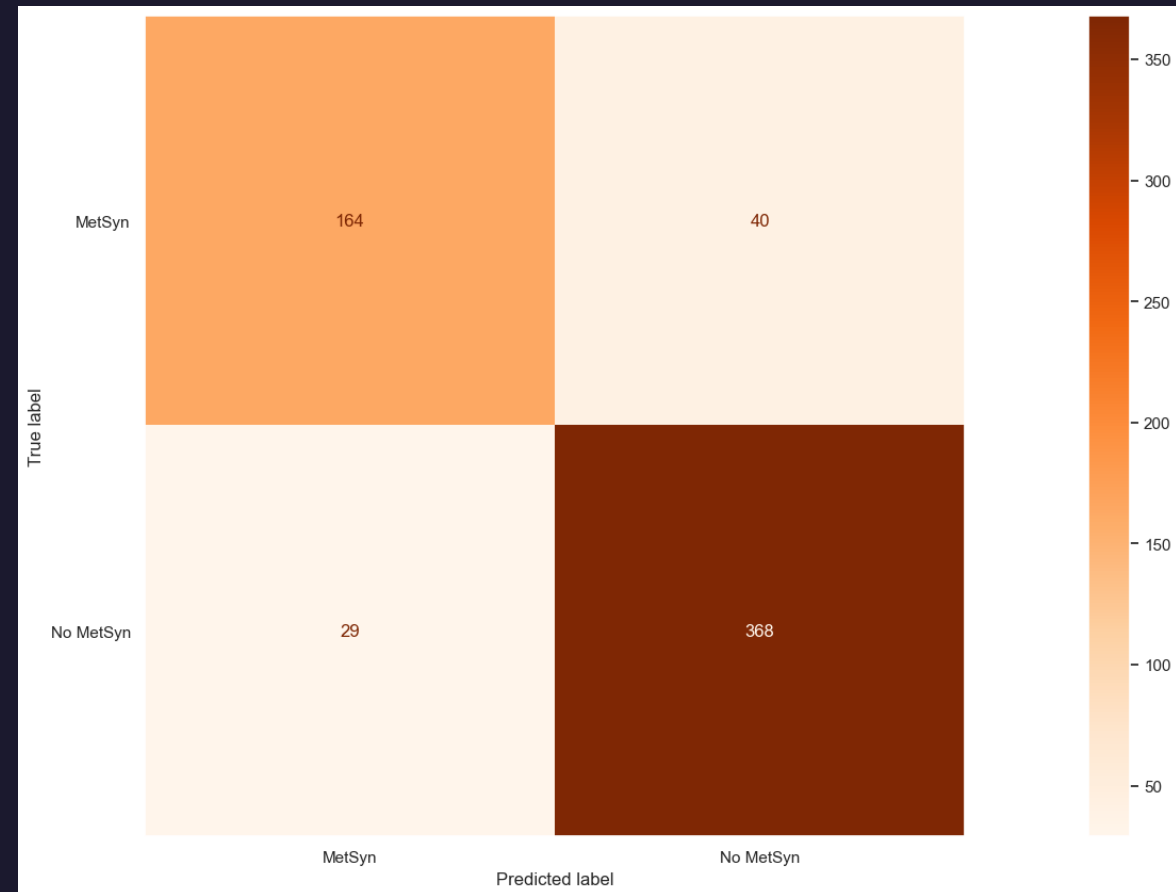
- This data will be essential to help doctors with diagnosis their patient with preventative care.

- This project will help reduce the amount of money hospitals use for patients that don't have insurance but need urgent care/surgeries.

- This data can lead to a reduction in strain for preventable medical conditions.

- We are here for patients, but they are not the only a part of the picture. Family, friends and colleagues are also part of our patients care and life.

With that being said....

The way to get started is to quit talking and begin doing.

Walt Disney

Thank You