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Predicting Vaccinations



MAYO CLINIC
HEALTH SYSTEM



Zach Rauch

On behalf of
SuperStats Data



AGENDA

- Business Question
- The Data
- Current Vaccine Rates
- Model Performance
- Patient Predictors
- Recommendations
- Next Steps



BUSINESS QUESTION

Our Mission

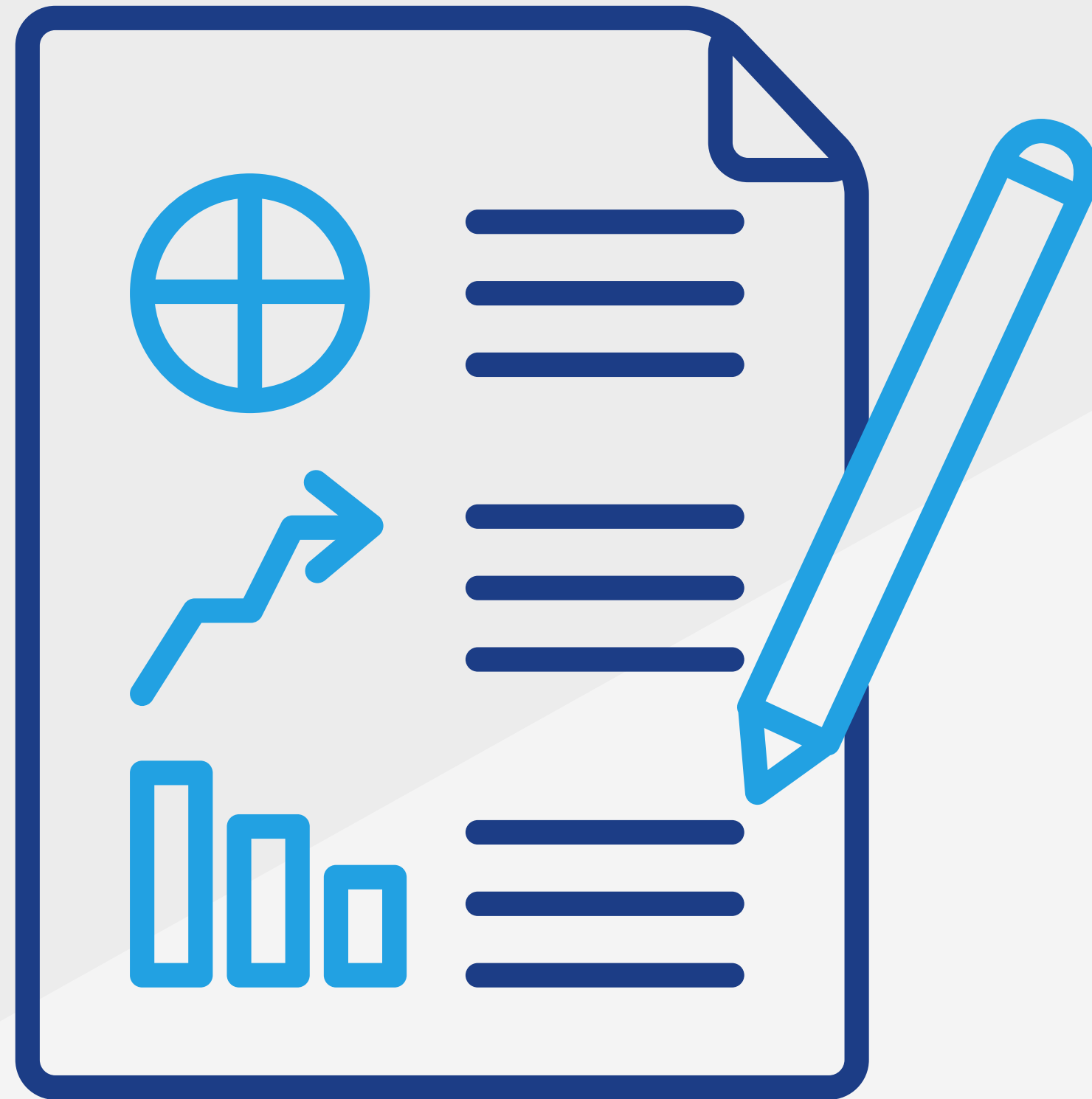
To Accurately Predict
who is most likely to
get Vaccinated.

Predictors

What predicts
whether a patient will
get Vaccinnated?

Reccomendation

How can we get more
people Vaccinated?

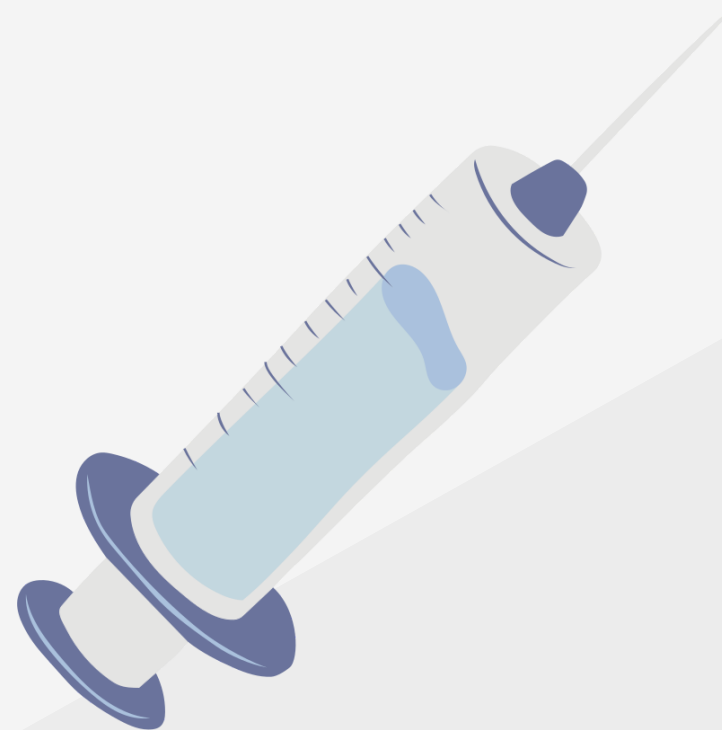


THE DATA

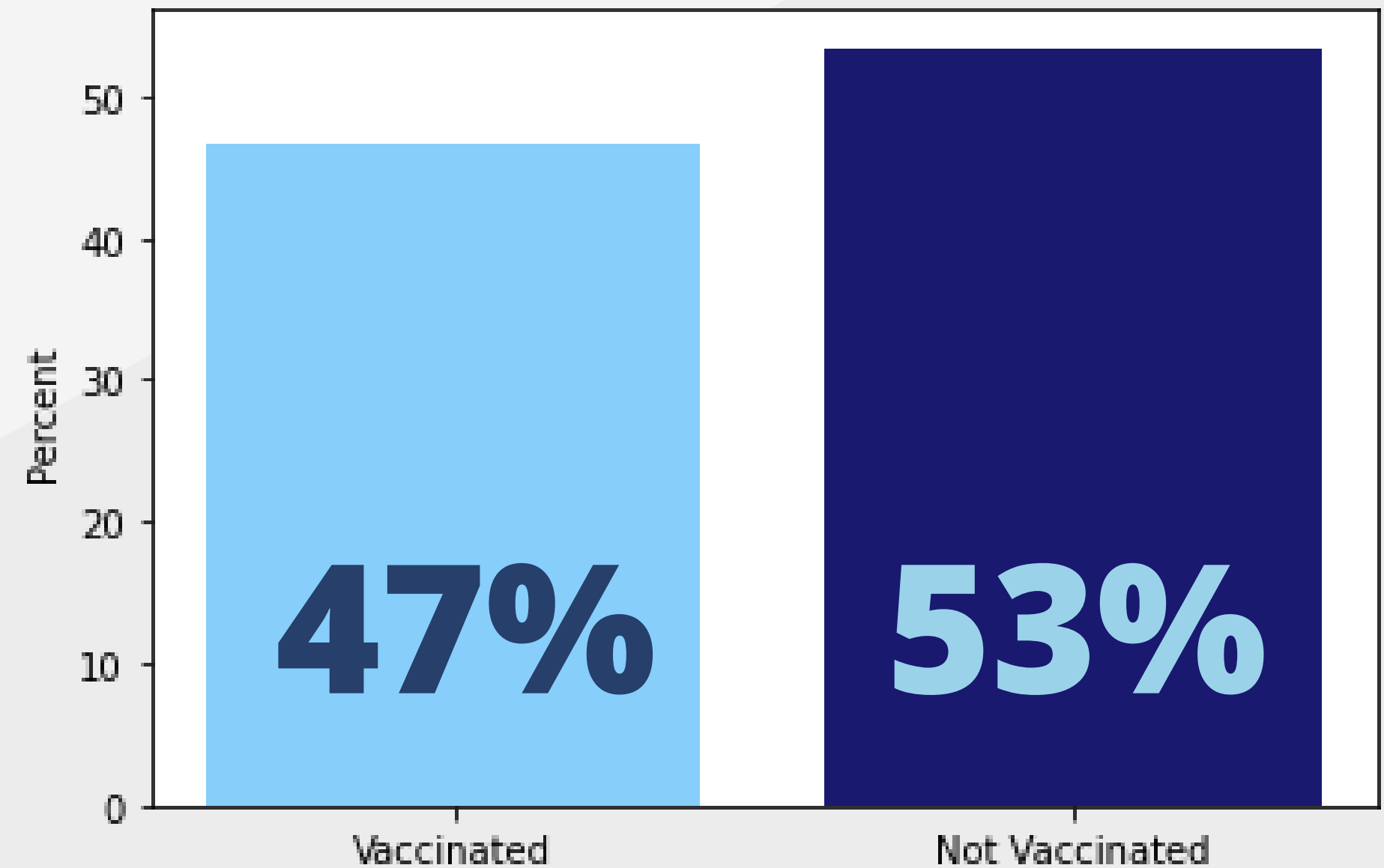
- **Provided by the CDC**
- **Collected via telephone survey**



CURRENT VACCINE RATES



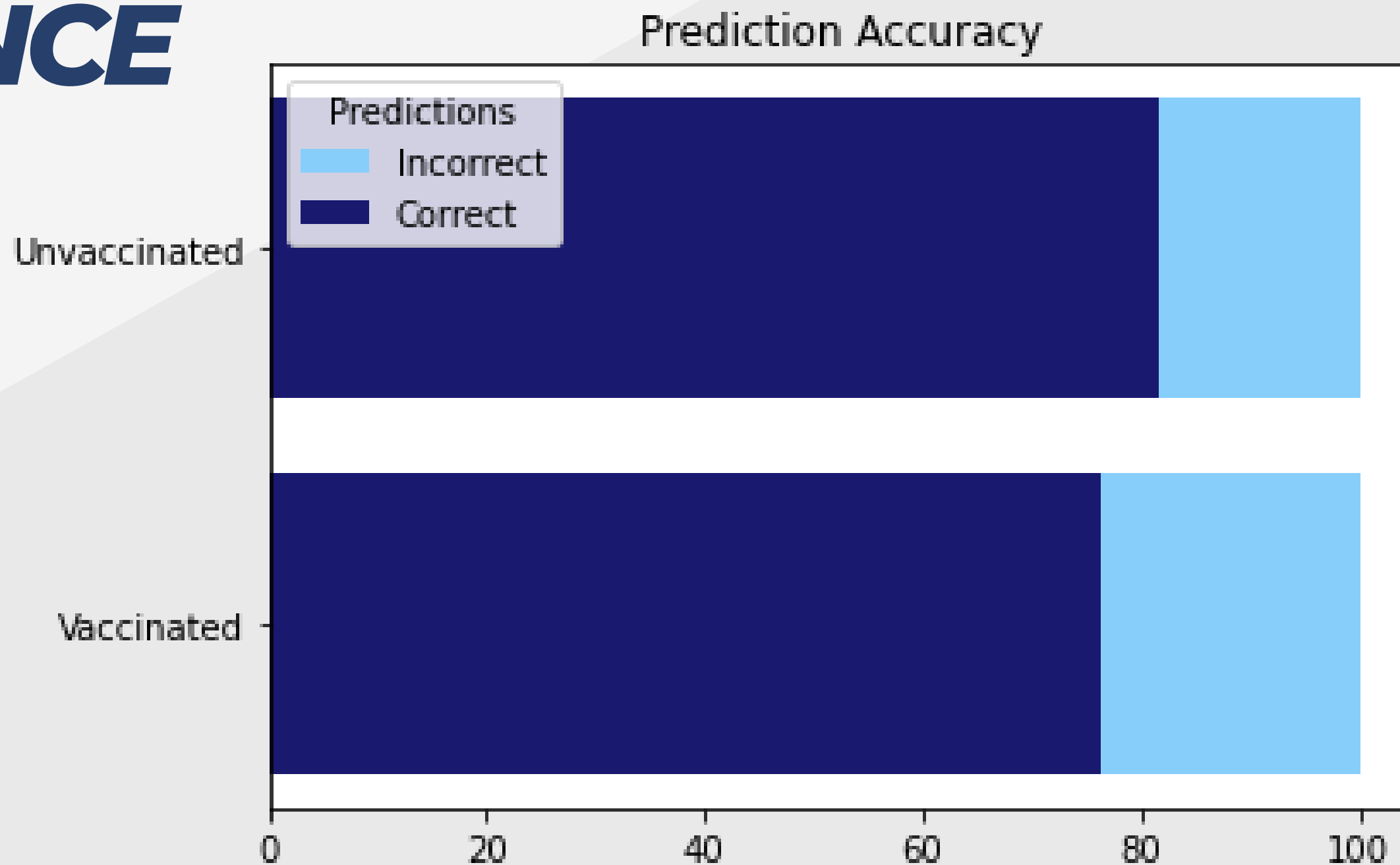
Vaccination Distribution



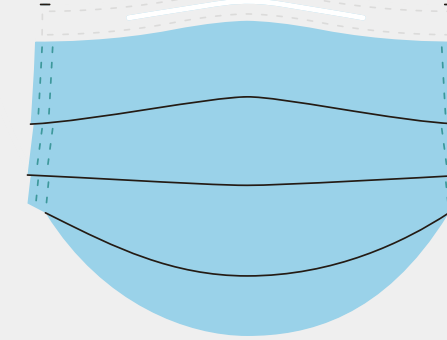


MODEL PERFORMANCE

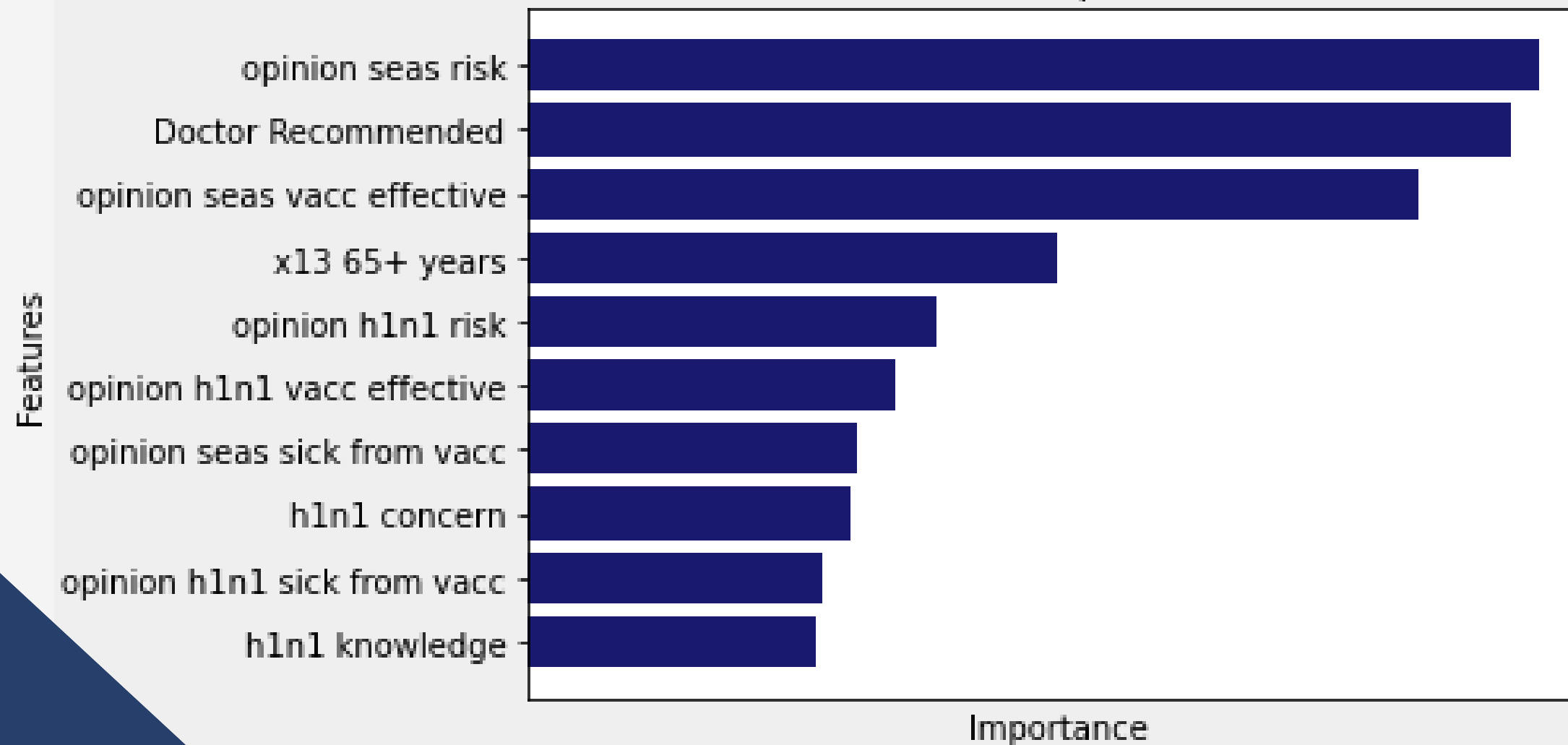
• **79% Accurate**



PATIENT PREDICTORS



Feature Importance



- **Flu Risk**
- **Doctor Recommended**
- **Vaccine Effectiveness**



NEXT STEPS

- **Collect more and new data**
- **Further Calibrate Models**
- **Predict COVID-19**

Vaccinations





THANK YOU

*We look forward to working
with you again in the future!*

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zach-rauch/](https://www.linkedin.com/in/zach-rauch/)

