

H1N1 and Seasonal Flu Vaccines



Ian Butler

In Association with the Center for Disease Control

CDC Objective - Increase Inoculation

Predict

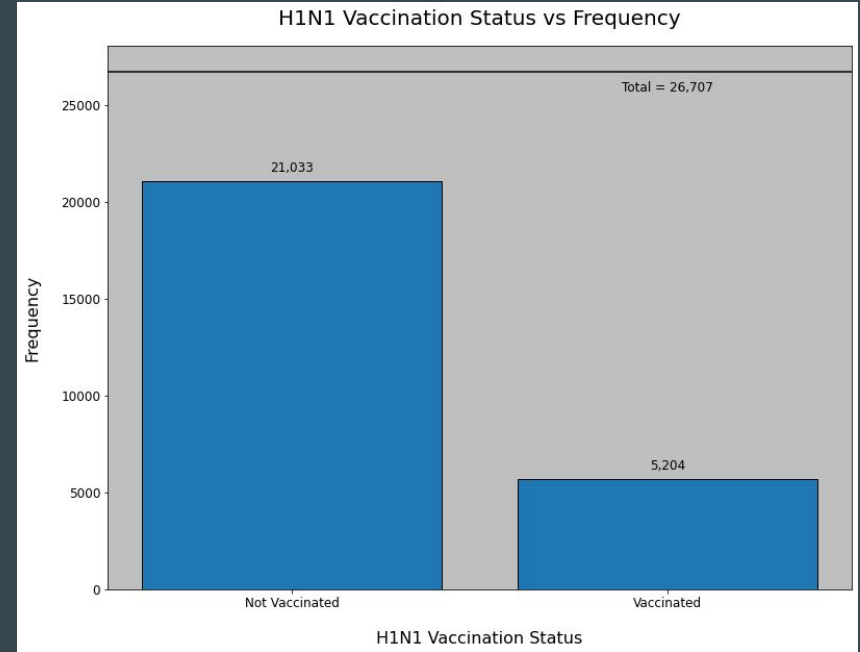
- Will they get the vaccine?

Understand

- What variables?

Take Action

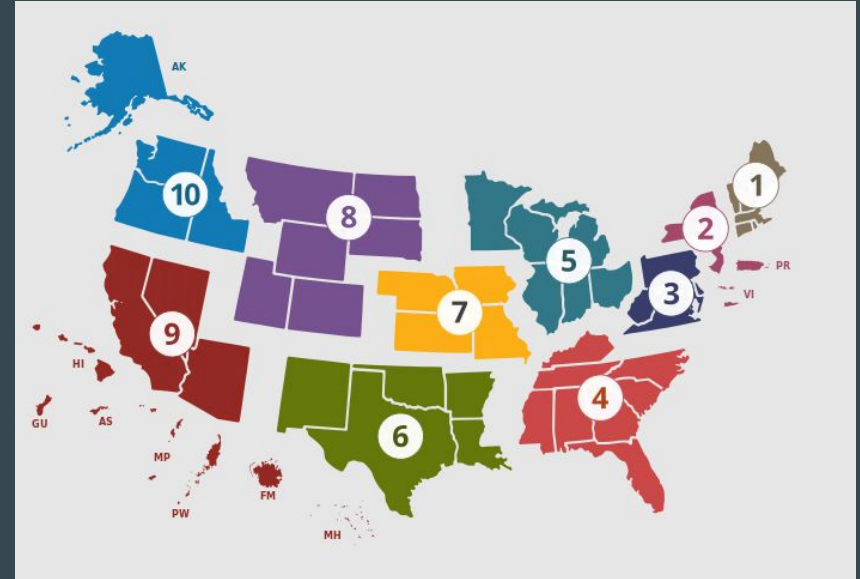
- What can we change?



Data - National 2009 H1N1 Flu Survey

Personal vaccination patterns

- Psychographics
 - Knowledge
 - Behaviors
 - Opinions
- Demographics
 - Age
 - Race
 - Sex



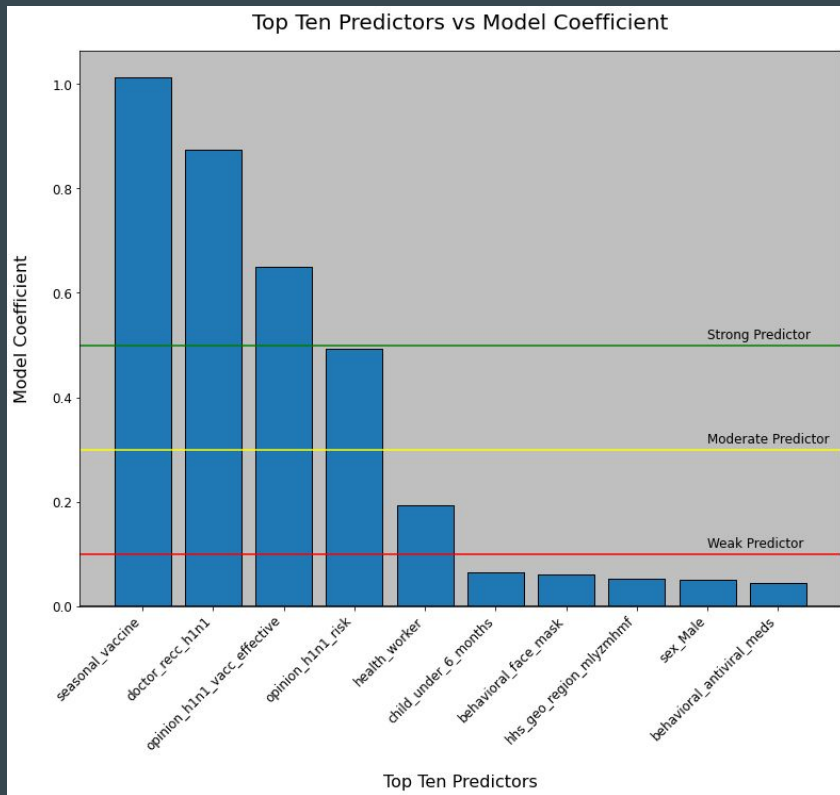
Results

Model Performance

- 85% Predictions Correct
- 70% Vaccinations Correct
- 51% Vaccinations Captured

H1N1 Vaccine Influencers

- Seasonal Flu Vaccination
- Doctor Recommendation
- H1N1 Vaccine Effectiveness



Conclusions

Recommendations:

- Educate
 - Seasonal flu vaccine
 - How and Why
- Partner
 - Doctors
 - Respected
- Illustrate
 - H1N1
 - Efficacy



Moving Forward

Next steps:

- Engineer
 - More data
- Improve
 - Vaccinations captured
- Expand
 - Different models

Using this model:

- Group by clinic:
 - Vaccination History
 - Check-Up History
 - Opinion Polls
- Predict clinic need
- Target vaccination efforts

Thank you!

Email:
ianbutleremail@gmail.com

GitHub:
github.com/ChumpyDuelle

LinkedIn:
linkedin.com/in/iانbutler/

