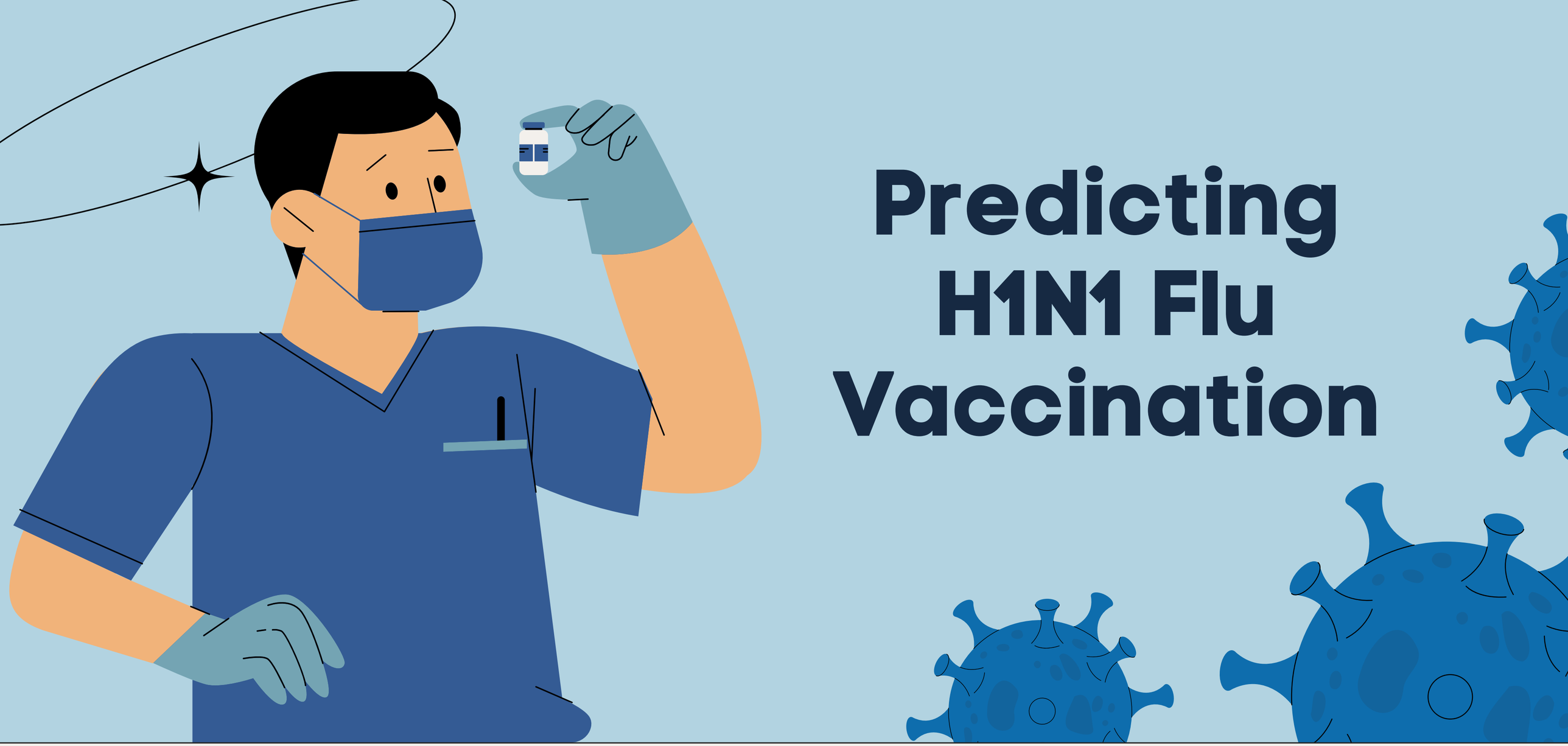


Predicting H1N1 Flu Vaccination

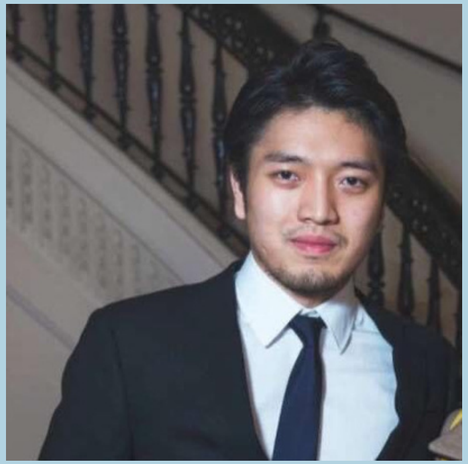
Menendez & He Strategic Advisory Group - U.S.

Meet the Team

Data Science Industry Disrupters

Brandon Menendez

CTO



Xibei (Julian) He

CEO

MENENDEZ & HE STRATEGIC ADVISORY GROUP - U.S.

Content Overview

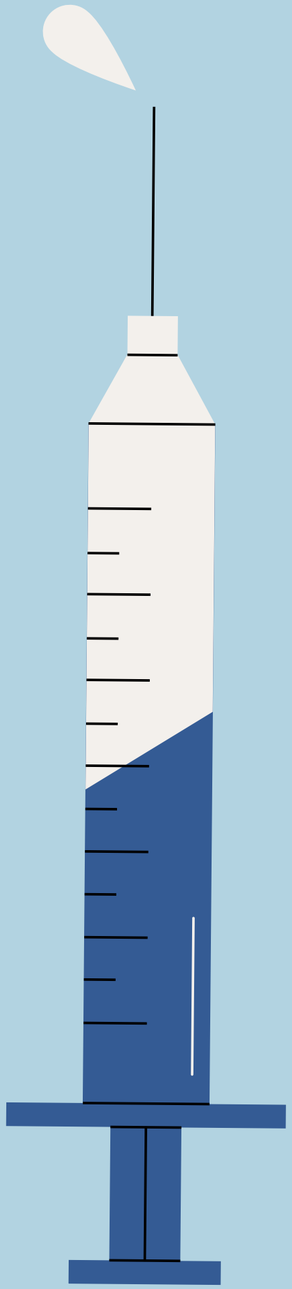
01 Overview & Business Problem

02 Data Understanding & Methods

03 Modeling Results

04 Recommendations

05 Looking Forward



2009 H1N1 Pandemic

- 700m - 1.4bn cases worldwide
- 249,000 - 280,000 deaths
- Outbreaks in Morocco, Malta, and Iran

Data source: CDC

Model Results

Model Accuracy

85%

Most Important Factor

Seasonal Flu Vaccine

Business Problem

Business Problem

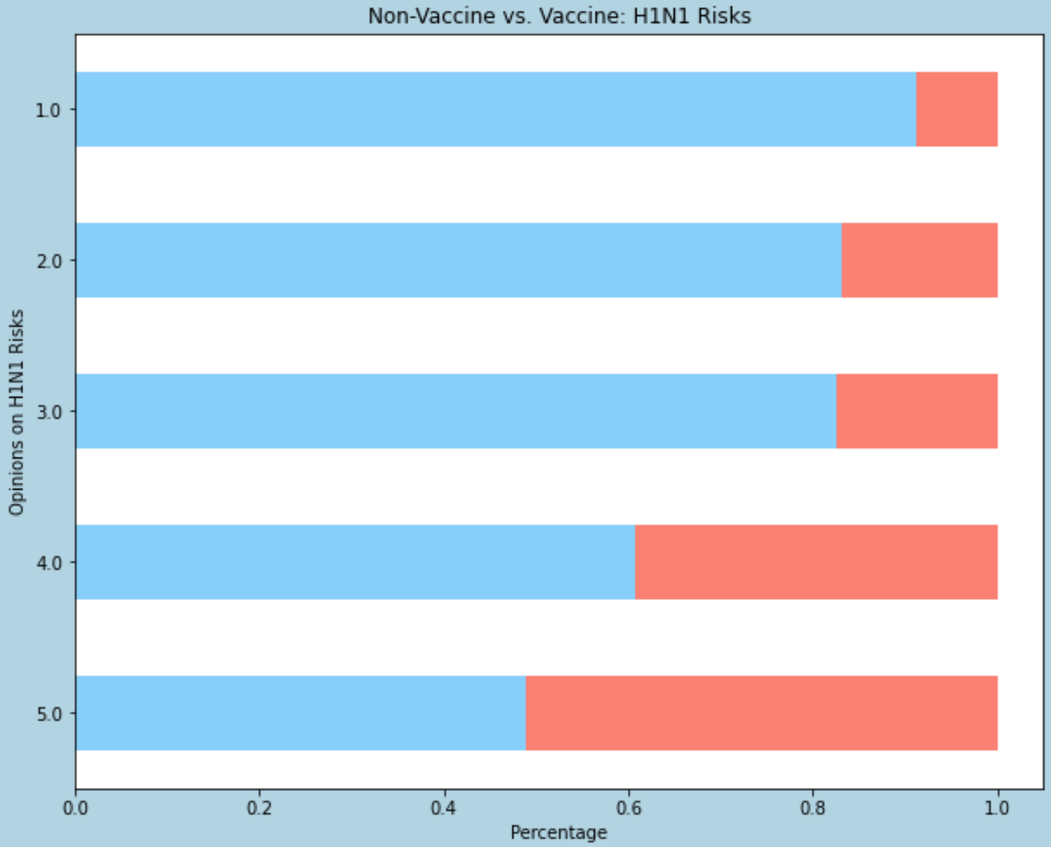
- Identify key factors
- Target groups for outreach

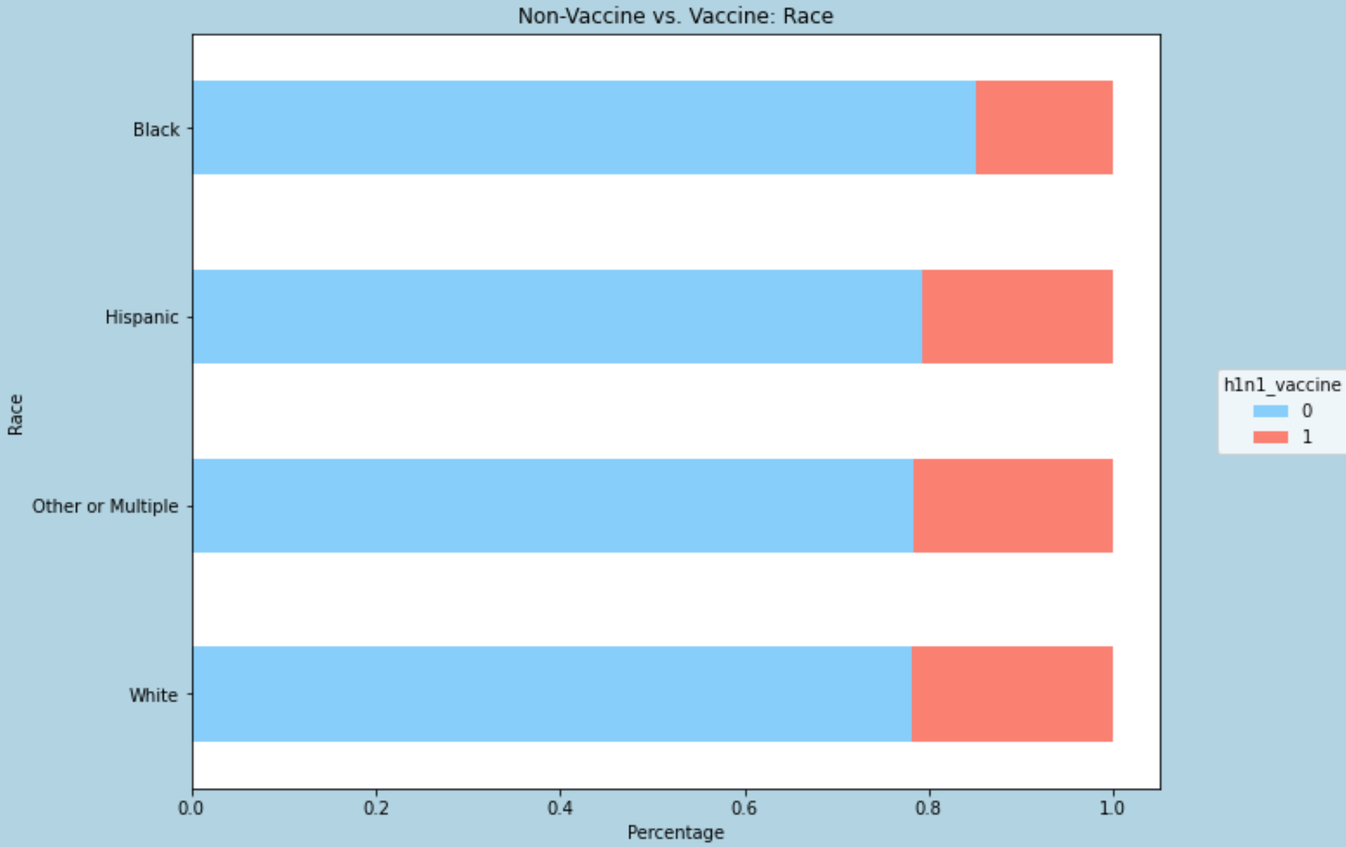
Data & Methodology

Data Exploration

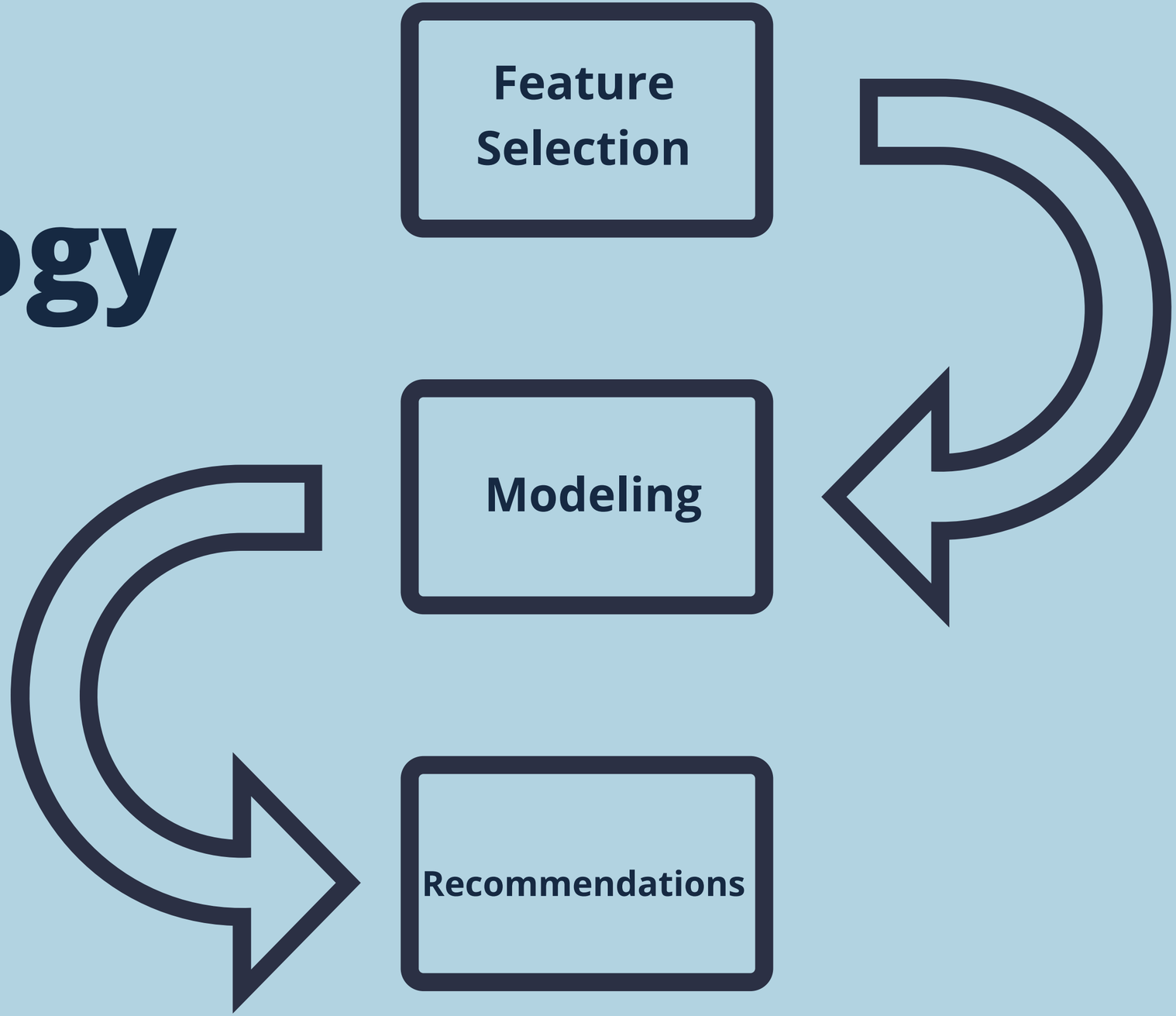
- 2009 National H1N1 Flu Survey (NHFS)
- Opinions about H1N1 and Flu vaccines
- 26,706 survey respondents

Features Exploration





Methodology



Modeling

Model Prediction Results

85%

Model accuracy

81%

Pro-vaccine population

80%

Anti-vaccine population

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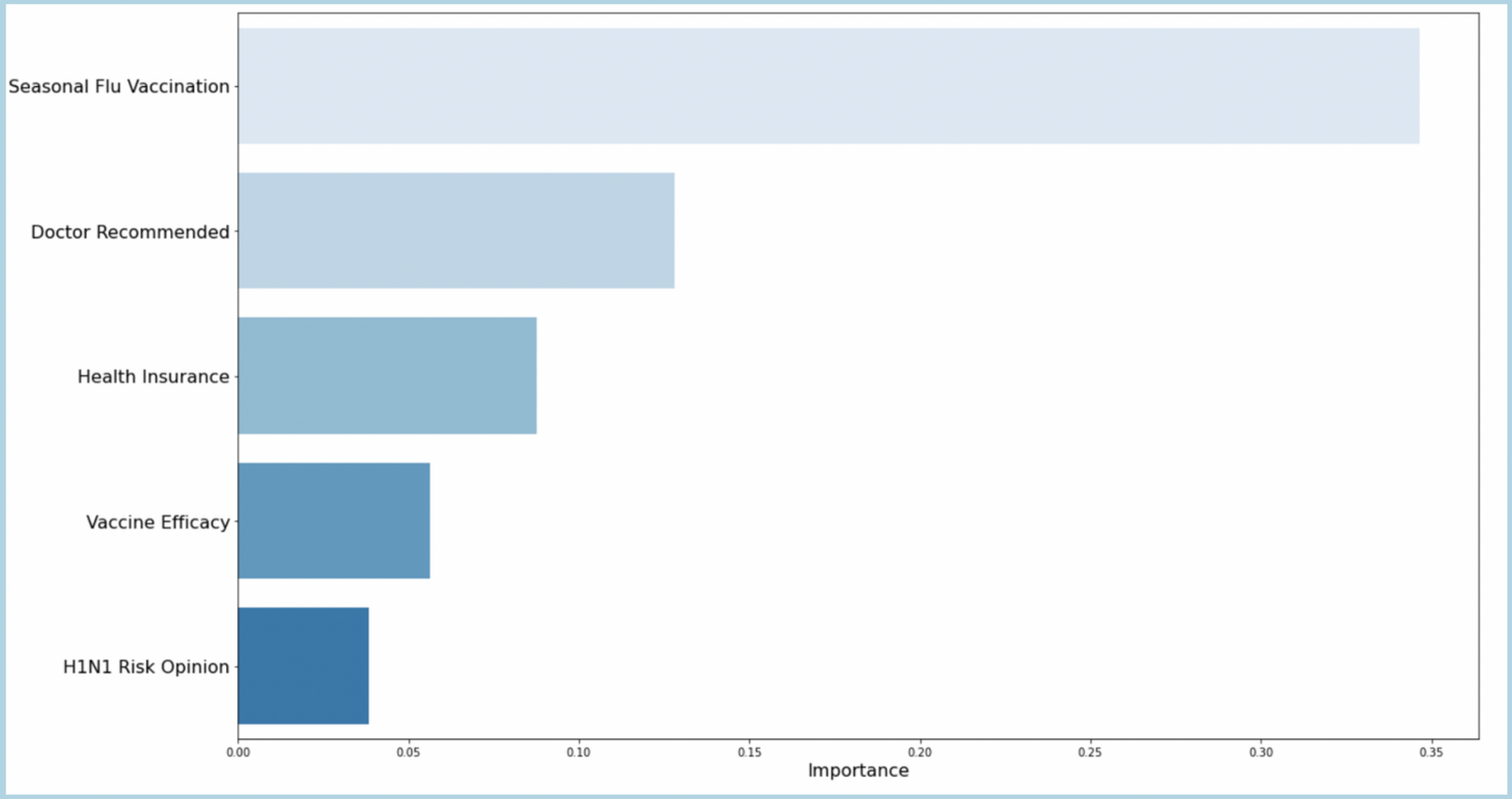
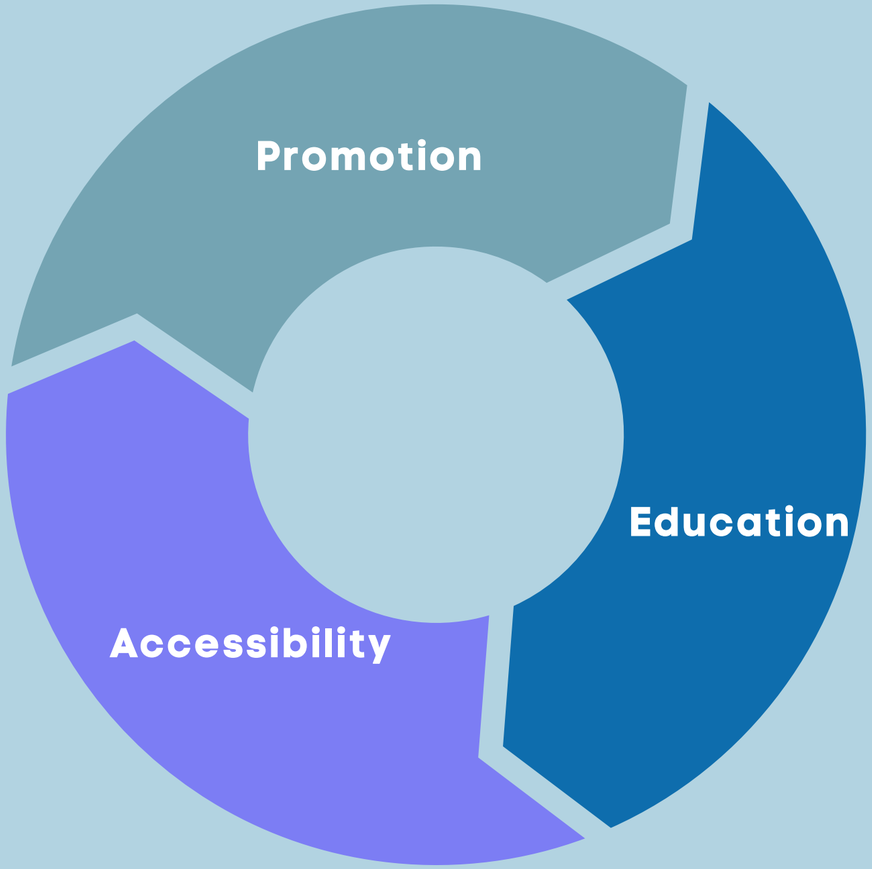
Factors influencing vaccination



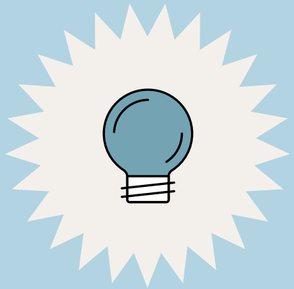
Recommendations



Looking forward

Enhanced modeling

Geographical Data



Study Non-vaccinator

Thank you !

Questions?

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CTO

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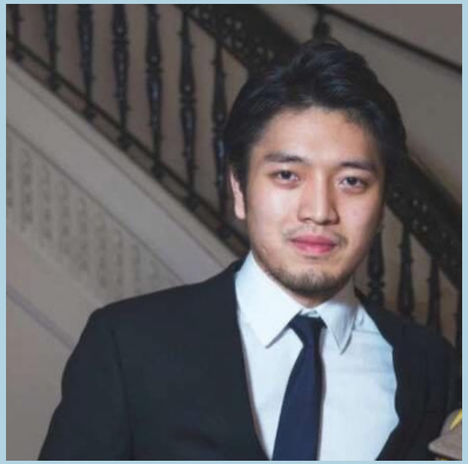

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