## Tackling Flu & Vaccine Misinformation

## **Data Team**

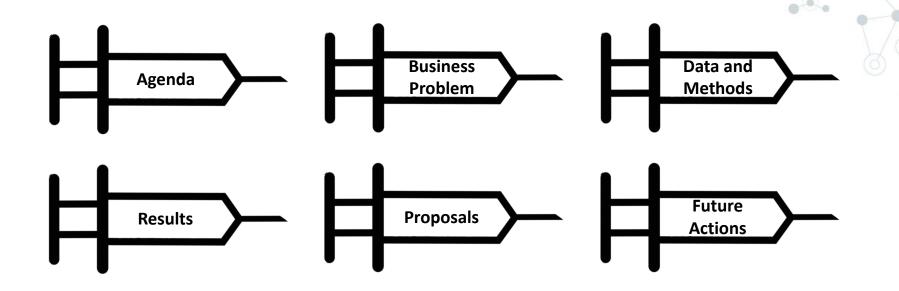


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# **Business Problem**



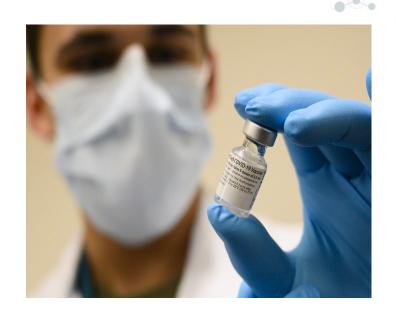
"To promote health and quality of life by preventing and controlling disease, injury, and disability."



#### Boosting Disease Awareness and Tackling Vaccine Misinformation

What features influence flu and vaccine knowledge?

O How to increase turnover rate?





## **65%**

of respondents <u>LACK</u>
the appropriate
knowledge of H1N1
flu and vaccine



#### **Important Features**

Education Level

Worry of getting sick from vaccine

Overall concern



## Data & Limitations

#### Data and Limitations

- 2009 Survey Data
- ~27k respondents

Data from Center for
 Disease Control and
 Prevention (CDC) and
 National Center for Health
 Statistics (NCHS)

## DRIVENDATA





## Methods and Results

#### Modeling

- Decision Tree identify important features
- Logistic Regression predictions





## Education Level < 12 years

= ~ 0.5x LESS LIKELY to be knowledgeable about H1N1

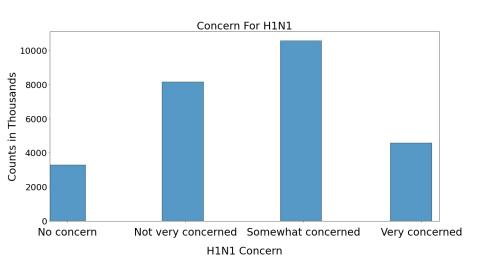


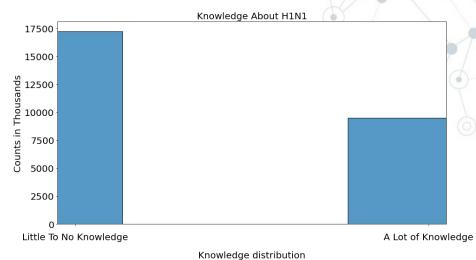


## Precision = 60%

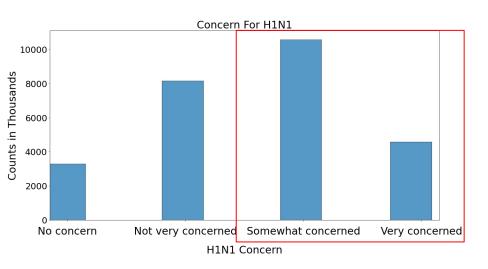
False Positives == False information

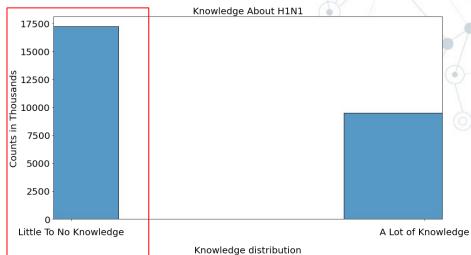
#### Knowledge and Concern for H1N1





#### Knowledge and Concern for H1N1







## Recommendations



#### Recommendations

 PR Campaign to spread correct information + resources

O H1N1 Vaccine awareness

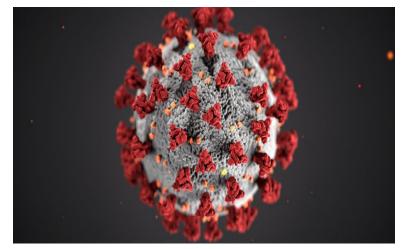
Increase educational resources



## Future Considerations

#### Modern Problems Require Modern Solutions

- COVID-19 Survey and Data focus on new health issues
- Outreach + resources for underrepresented communities



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# Questions?

#### **Appendix**

- Recommendations Vaccine Photo
- Coughing Graphic
- Business Problem Vaccine Photo
- NCHS Logo
- O CDC Logo
- O Covid-19 Graphic
- Graduation Cap Graphic
- Machine Learning Graphic







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