



# RECEIVING THE **FLU VACCINE**

**MAXIMIZING VACCINE UPTAKE THROUGH CLASSIFICATION**

# MEET THE TEAM

**PAUL JUSTAFORT**



**AUNG SI**



# OVERVIEW

1

**MODELLING**

2

**INSIGHTS**

3

**ENHANCING VACCINE UPTAKE**

# BUSINESS PROBLEM

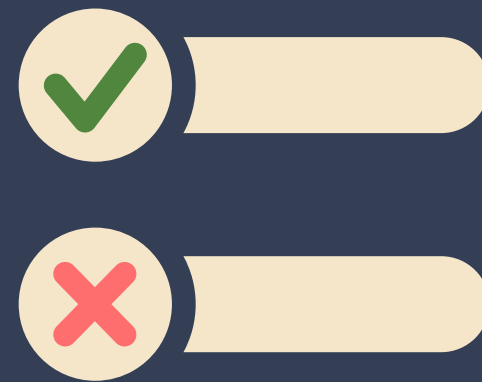


WHAT MEASURES CAN WE TAKE TO ENHANCE AND MAXIMIZE VACCINE UPTAKE?

# DATA UNDERSTANDING

National 2009 H1N1 Flu Survey (NHFS) data from the 2009-10 flu season

ABOUT THE DATA
26707 ENTRIES
35 SURVEY QUESTIONS
BEHAVIORAL, OPINION, DEMOGRAPHIC



## OUR PREDICTIVE NORTH STAR: RECALL

## MINIMIZING FALSE NEGATIVES

Number of individuals the model predicts will not receive the vaccine, but actually did.

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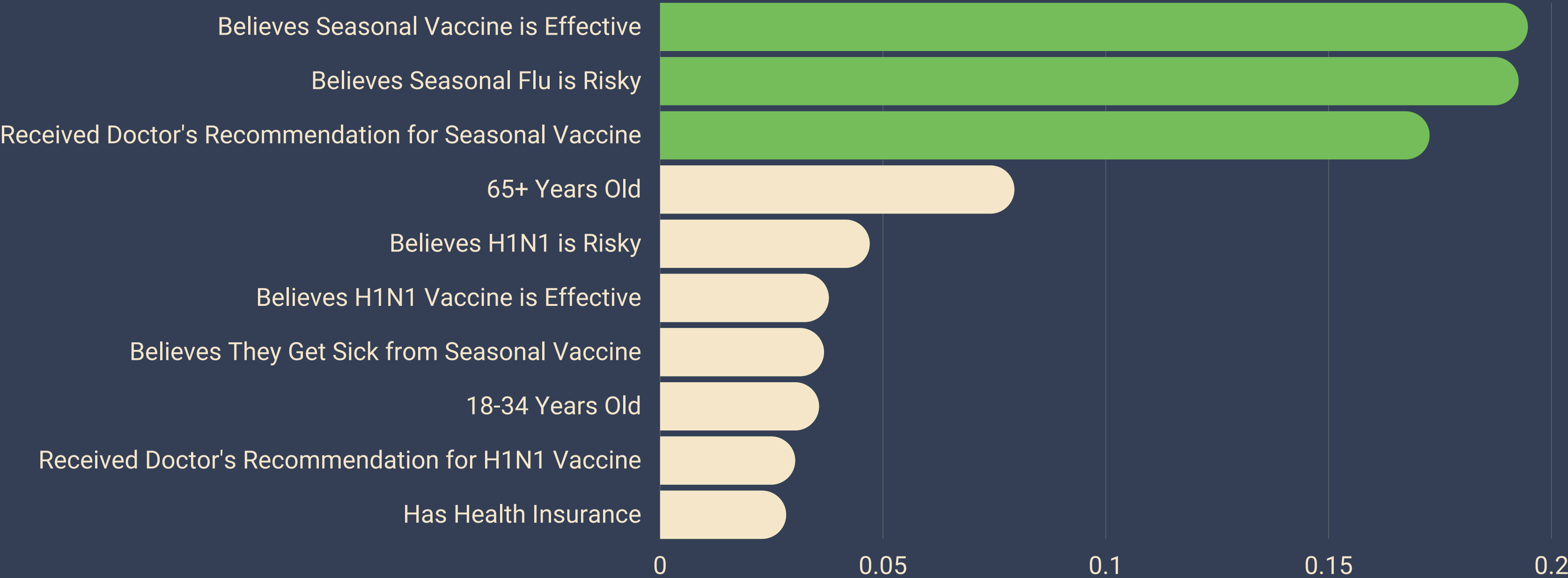
- Identifying those who actually need vaccination.
- Targeting the right individuals.
- Reduces risk of missing potential vaccine recipients.

## MODEL PERFORMANCE ON UNSEEN DATA

**75.52% RECALL**

**77.84% ACCURACY**

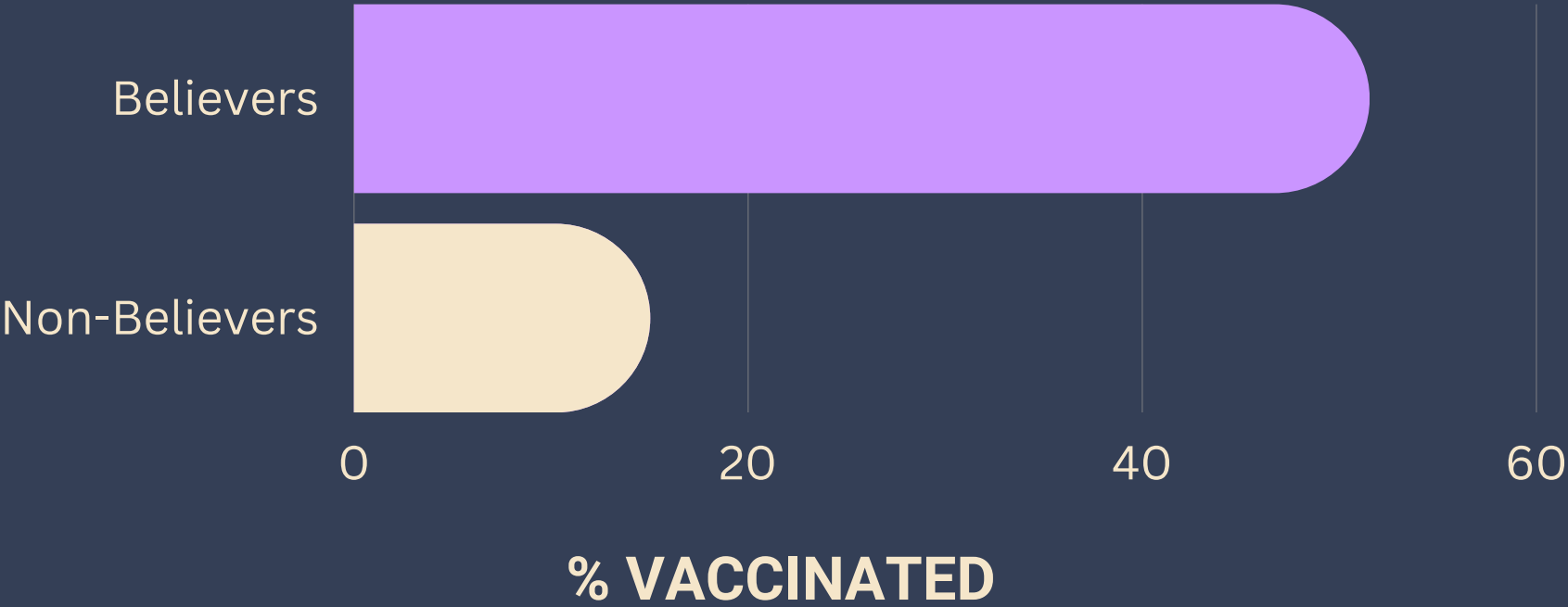
# WHAT ARE THE DETERMINANTS?





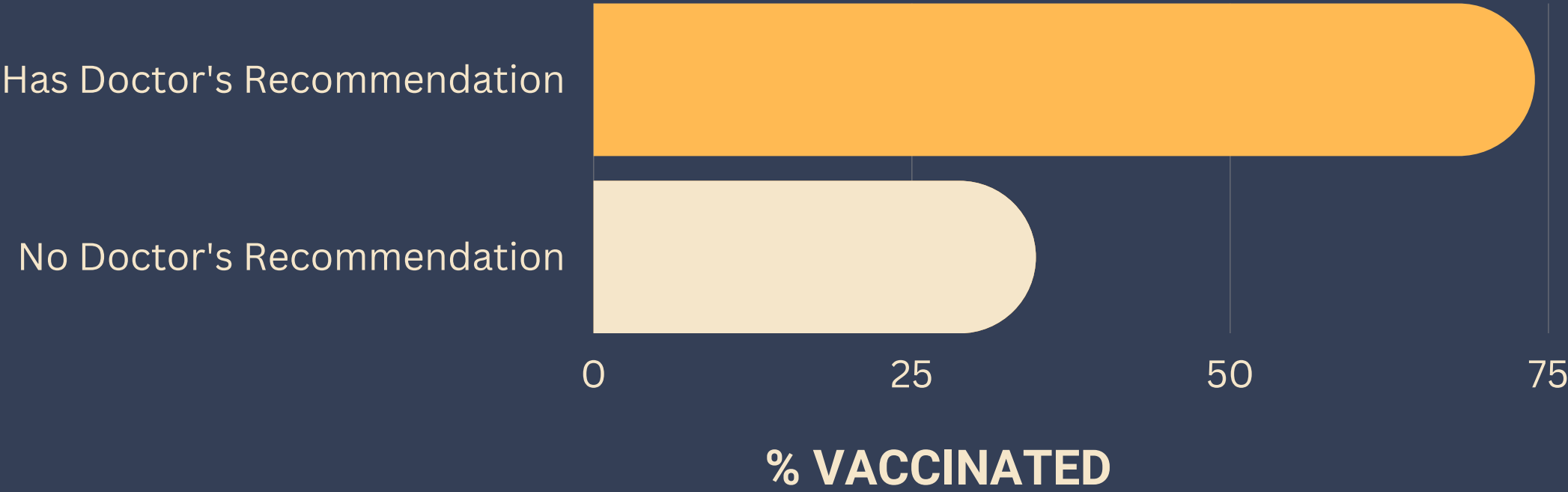
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OPINION & EDUCATION



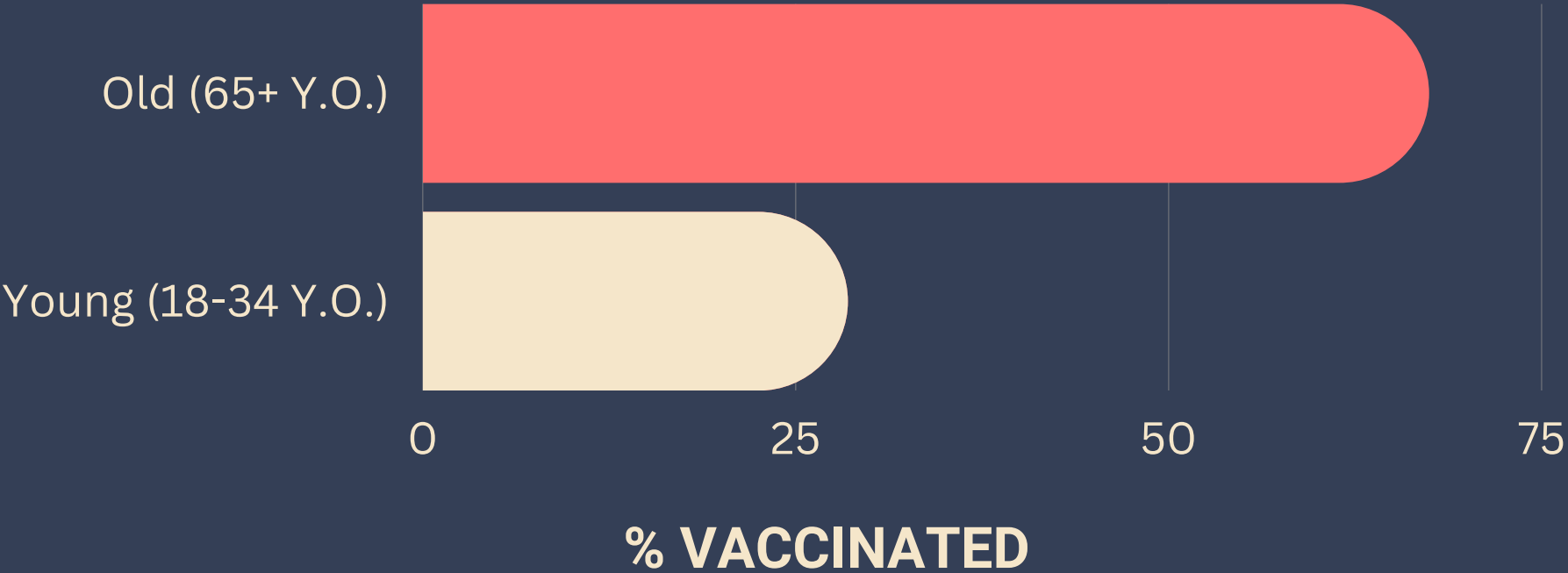
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**THE PROFESSIONAL WORD**



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DIFFERENCES IN AGE



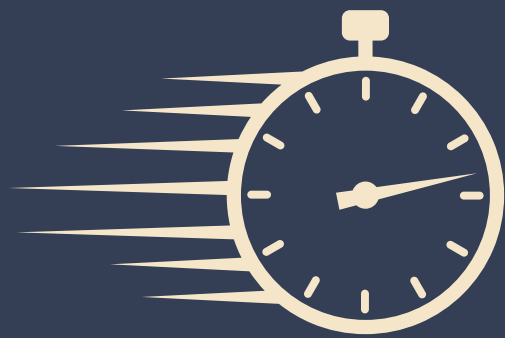
# RECOMMENDATIONS

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- Implement educational campaigns to elucidate vaccine effectiveness using tangible evidence.
  - Provide resources to doctors for integrating seasonal vaccine recommendations in patient consultations.
  - Create age-specific, targeted marketing campaigns, addressing health risks and societal benefits.
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# NEXT STEPS

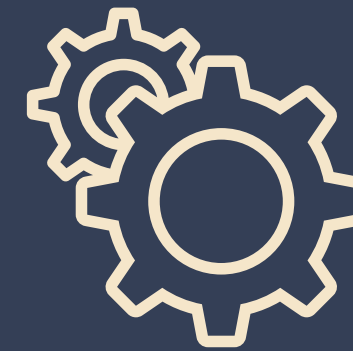
**1** ADAPTIVITY



**2** COLLABORATION



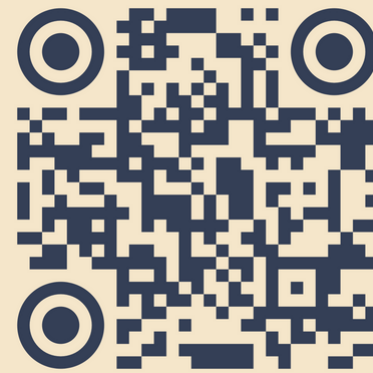
**3** OPTIMIZATION



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**THANK YOU.**



Check out our repository!