

VACCINE HESTANCE

Public Health Insights from the 2009
H1N1 Flu Survey

Presented by Dr Harrison
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OBJECTIVE



Predict H1N1 and Seasonal flu vaccine uptake using survey data.

Identify demographic and behavioral drivers of vaccine acceptance.

Support better targeting of public health campaigns.

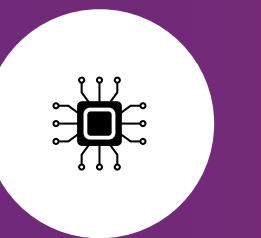
KEY STAKEHOLDERS



Public Health
Officials



Healthcare
Providers



Data Scientists &
NGOs



Policy Makers

KEY BUSINESS QUESTIONS



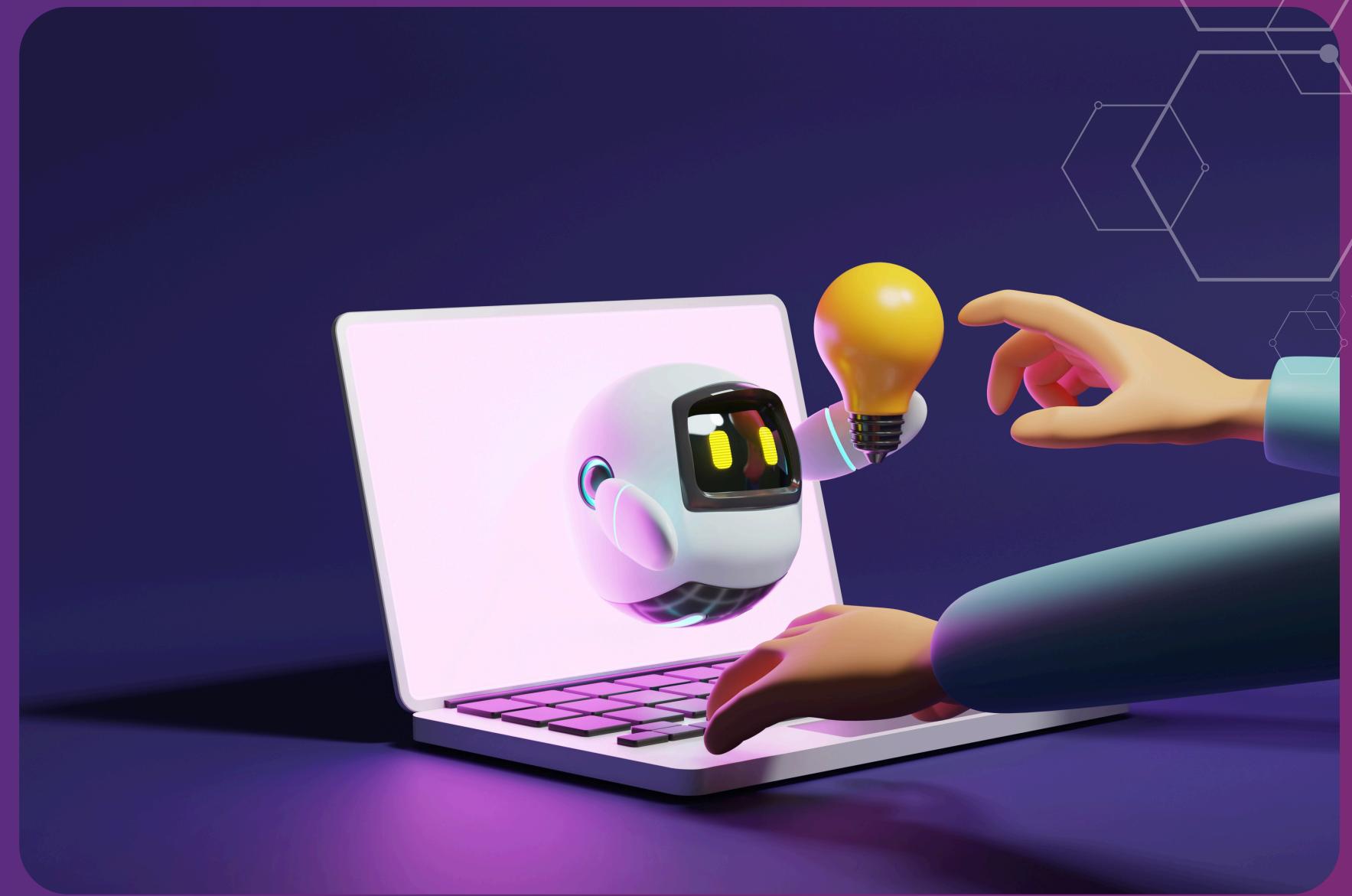
- Who is most likely to get vaccinated?
- What features are linked to vaccine hesitancy?
- Can we predict unvaccinated individuals?
- How can public campaigns be improved?
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MODEL PERFORMANCE

Logistic Regression: 83.6% Accuracy | F1 Score ~0.52



Decision Tree: 82.6% Accuracy | F1 Score ~0.53
Both models show reliable predictive performance.



KEY INSIGHTS

Targeted messaging can improve vaccine uptake.
Behavioral data provides actionable signals.

Doctor's recommendation is highly influential.
Concerns about effectiveness & side effects drive hesitancy.



RECOMMENDATIONS



- Empower healthcare providers to drive vaccine conversations.
- Tailor public messaging to concerns and misconceptions.
- Use predictive tools for targeting outreach.
- Focus on high-risk and low-uptake groups.
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THANK YOU

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Contact Information

