



# Forecasting Depression

*Center for Disease  
Control*

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# Presenter



Emory University,  
BBA in Finance

Data Science Student,  
FlatIron School

# Agenda



Stakeholder



Business Problem



Data



Analysis



Recommendations



Next Steps

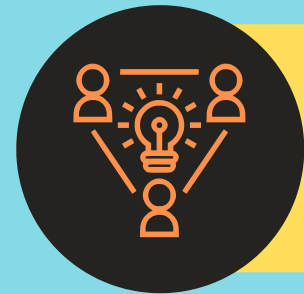


# Bottom Line



Modeling Error  
Reduced by 10%

# Stakeholder



Stakeholder



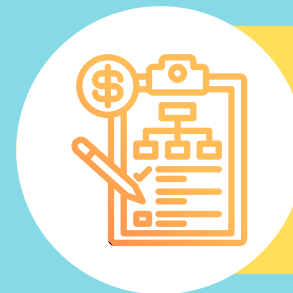
Business Problem



Data



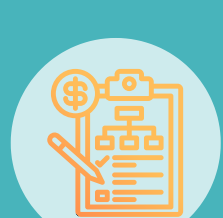
Analysis



Recommendations



Next Steps



**Saving Lives,  
Protecting People**

# Tracking Depression

**DIAGNOSTIC CRITERIA**

*1980*

**COST**

*\$326 Billion*

**MENTAL ILLNESS IS  
RISING**

*20%*



# Data



Stakeholder



Business Problem



Data



Analysis



Recommendations



Next Steps





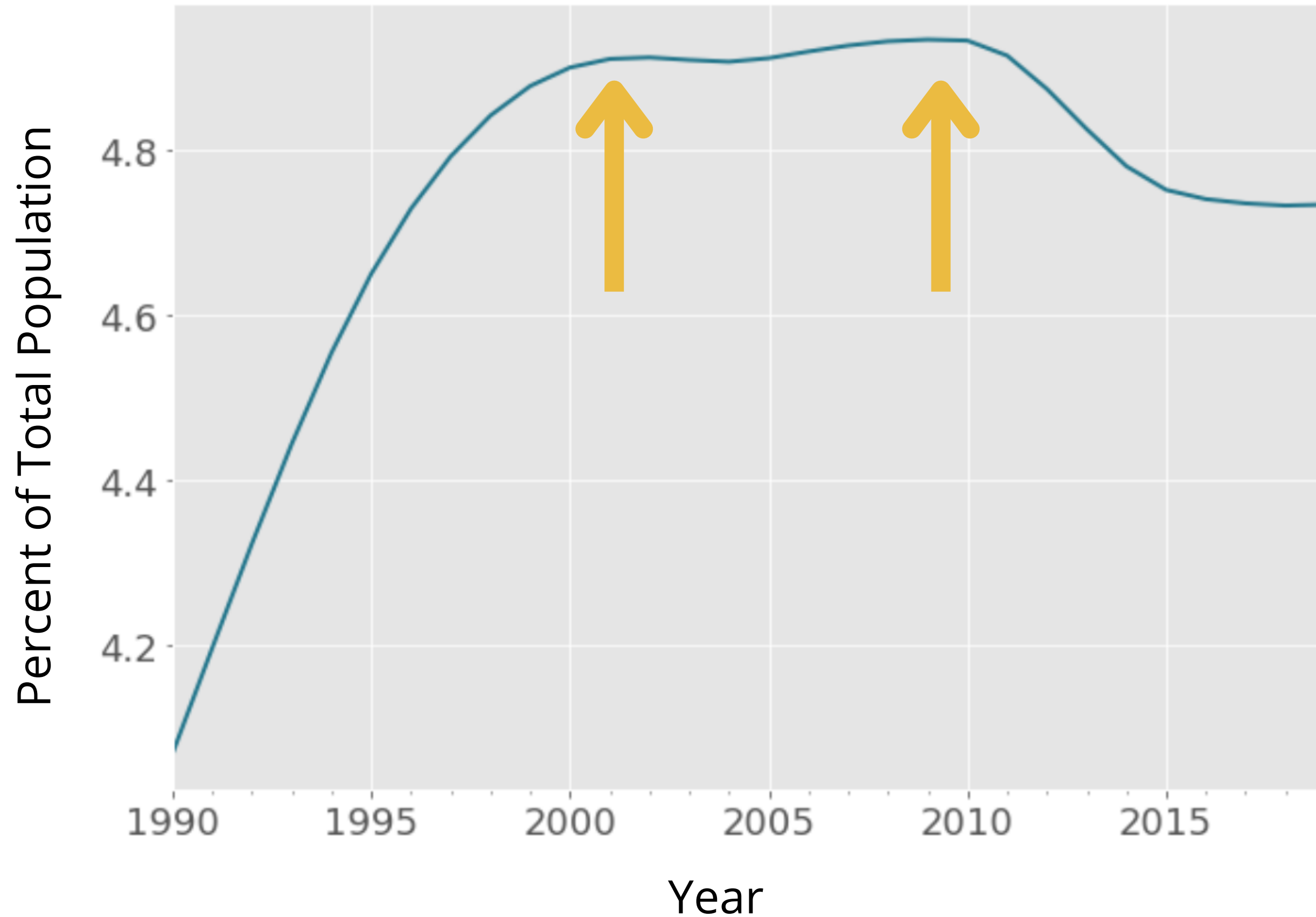
# World Health Organization (WHO)

*GLOBAL BURDEN OF DISEASE*

1990-2019



# Depression Rates in the U.S. Since 1990



# Analysis



Stakeholder



Business Problem



Data



Analysis



Recommendations



Next Steps







# **SARIMA,** **Predicting the Future**

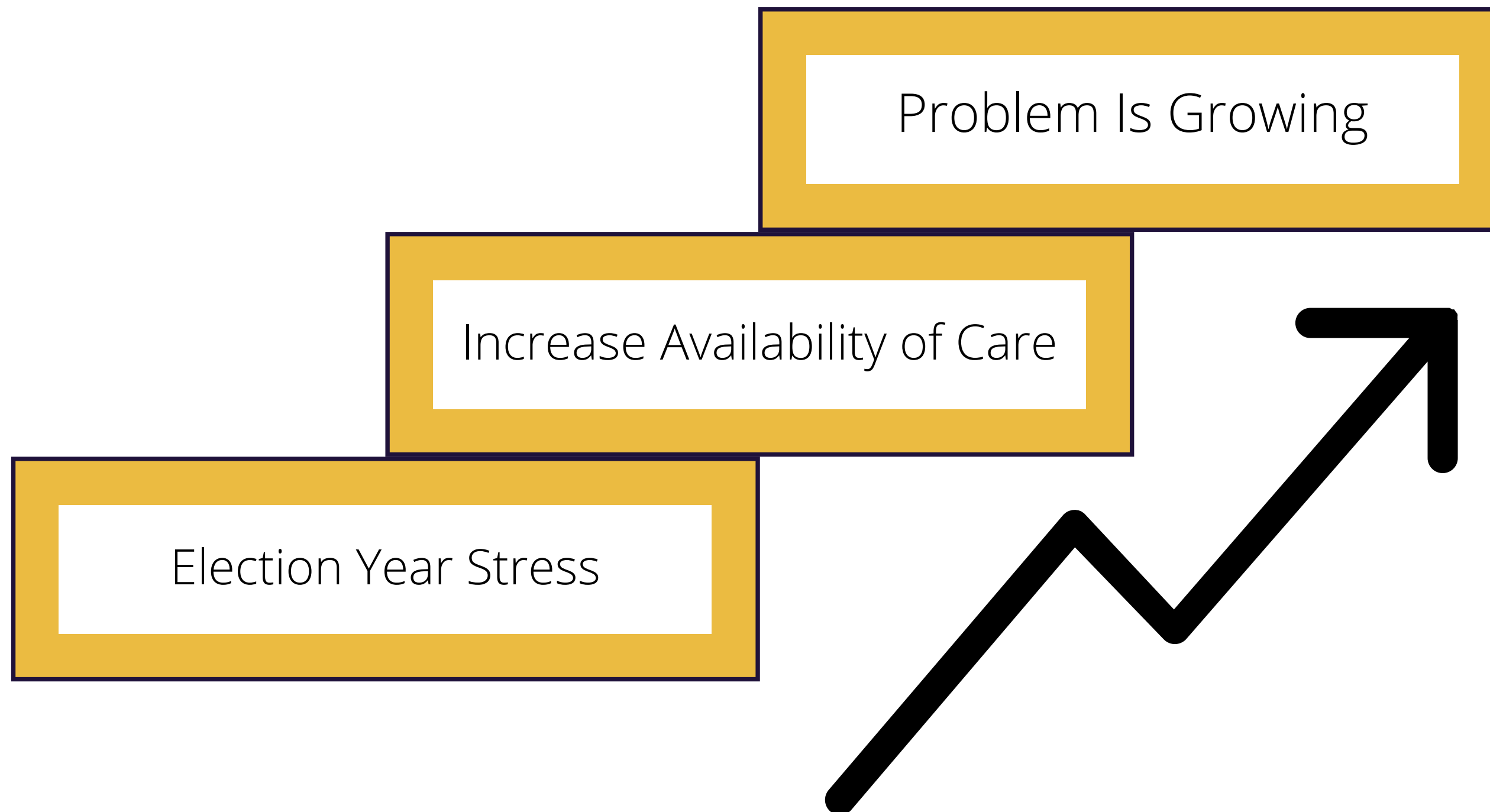
Past Values (2 Years)

Trend (1 Year)

Seasonality (4 Years)



# Recommendations



# Next Steps

1

Add Predictive Variables

2

Differences Between Age Groups and Gender

3

Analyze Disability Adjusted Life Years (DALY)





# Questions

# *Thank You*

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