

# Baby's First Years: Which Maternal Factors Predict Child Health Outcomes?

Nasim Sheikhi, Olivia Floody, Riya Gurnani, Kelly Phalen

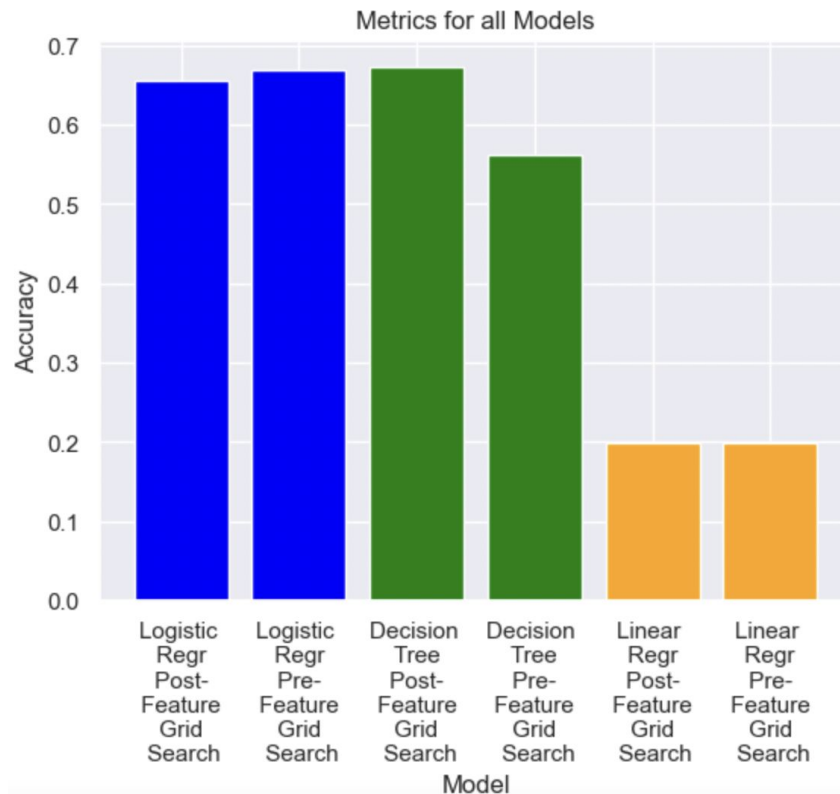
## Background

- BFY Study examines the impact of poverty and maternal health on child development
- Findings from this data can inform poverty reduction interventions
- Objective: Examine which maternal factors predict child development and health

## Methods

- Multiple linear regression with calculated overall child outcome as target
- Logistic regression & decision tree with binned target variable based on the median of the outcome
  - 2 categories: 'Good Health' & 'Poor Health'

## Results



## Conclusion

### Important features:

- Household income
- Mother's physical & mental health
  - Parenting stress
- Household relationships

### Implications of 70% accuracy

- Survey length should be decreased
- Limitation of study: Missing data
  - Shorter survey could collect more data
- Still is able to predict the outcome of child's health
- Metrics of survey can be used to determine what babies and mothers need most support
  - Local government can use to create and better allocate resources to these mothers