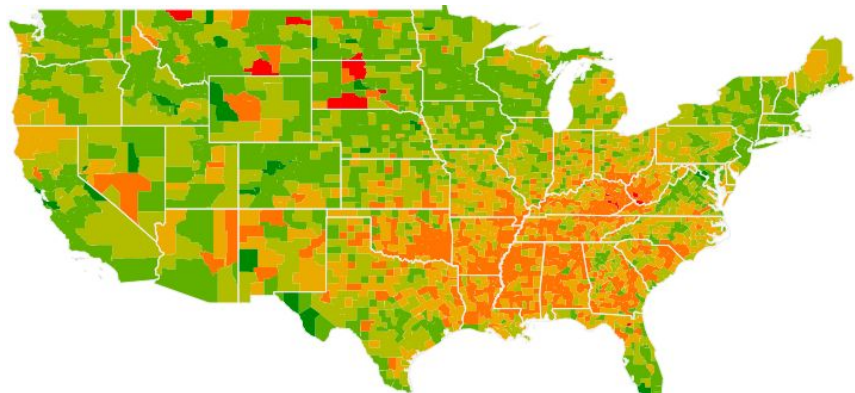


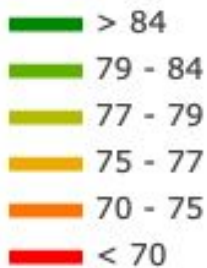
Life Expectancy in the US

Khairul Omar | Stuti Singh | Aleksandar Gakovic

from LiveLong Consultancy



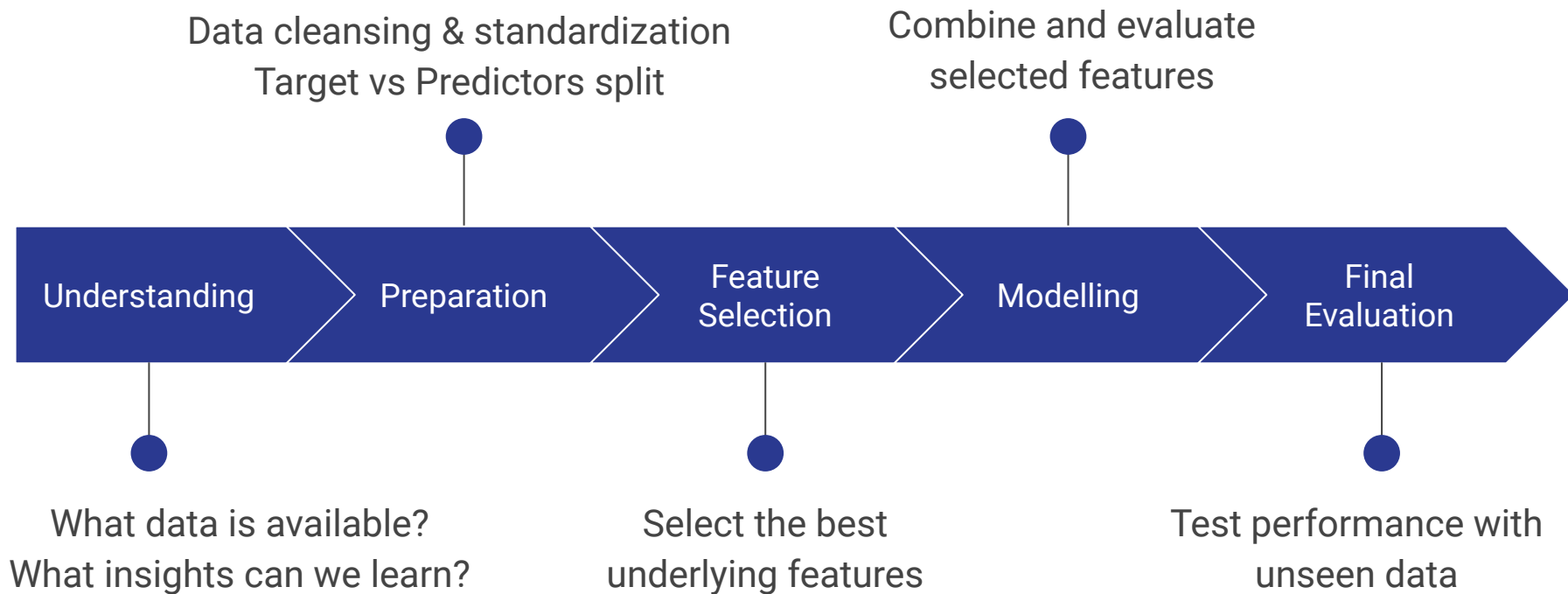
Life expectancy by county



Introduction

- We are consultants at LiveLong
- Big differences in life expectancy (20+ yrs) between counties
- **Mission:** to support govt to formulate healthcare policy and budget allocation
- **Objective:** to find the most significant contributing factors to life expectancy

Methodology



Feature selection techniques

Correlation



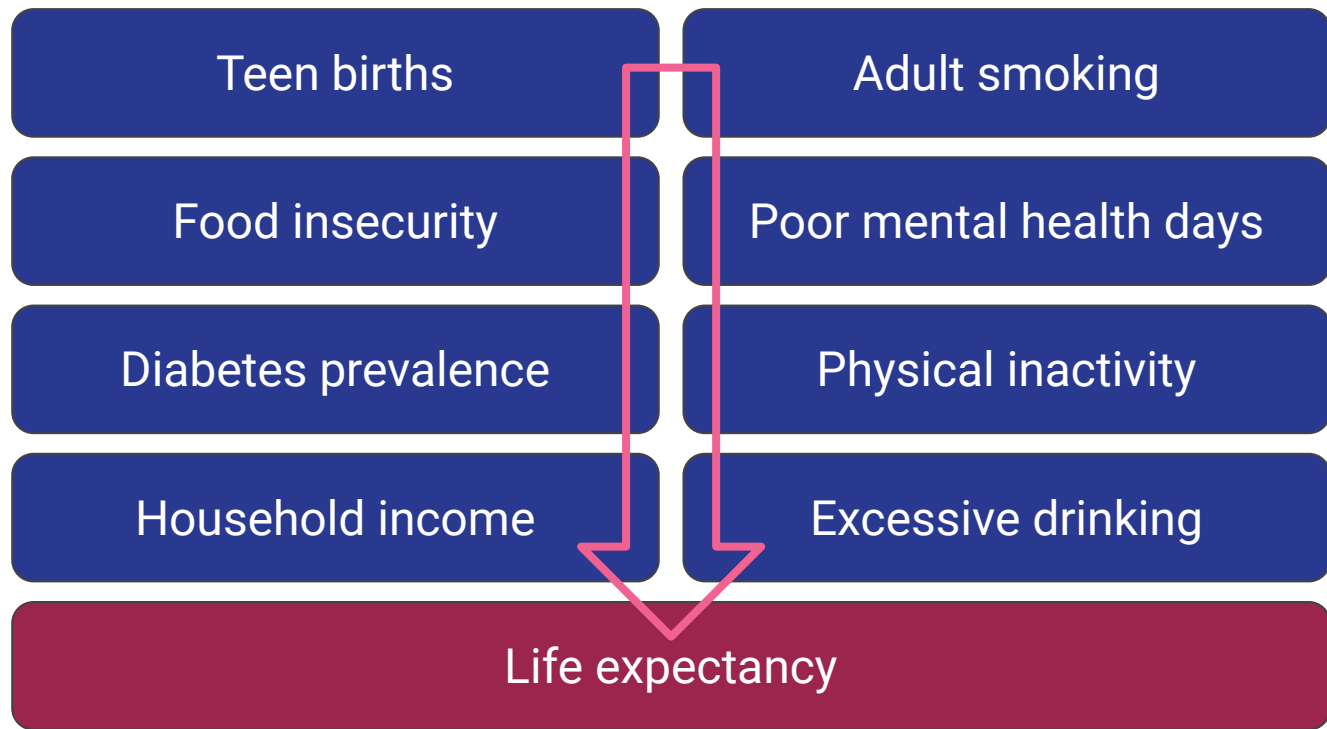
Multicollinearity

Polynomial

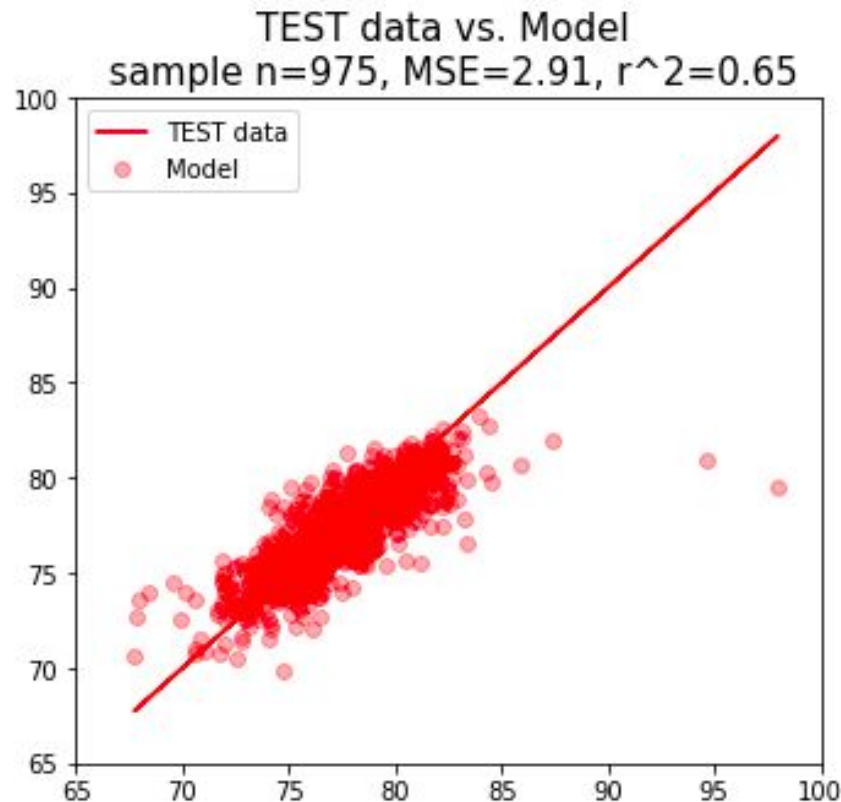
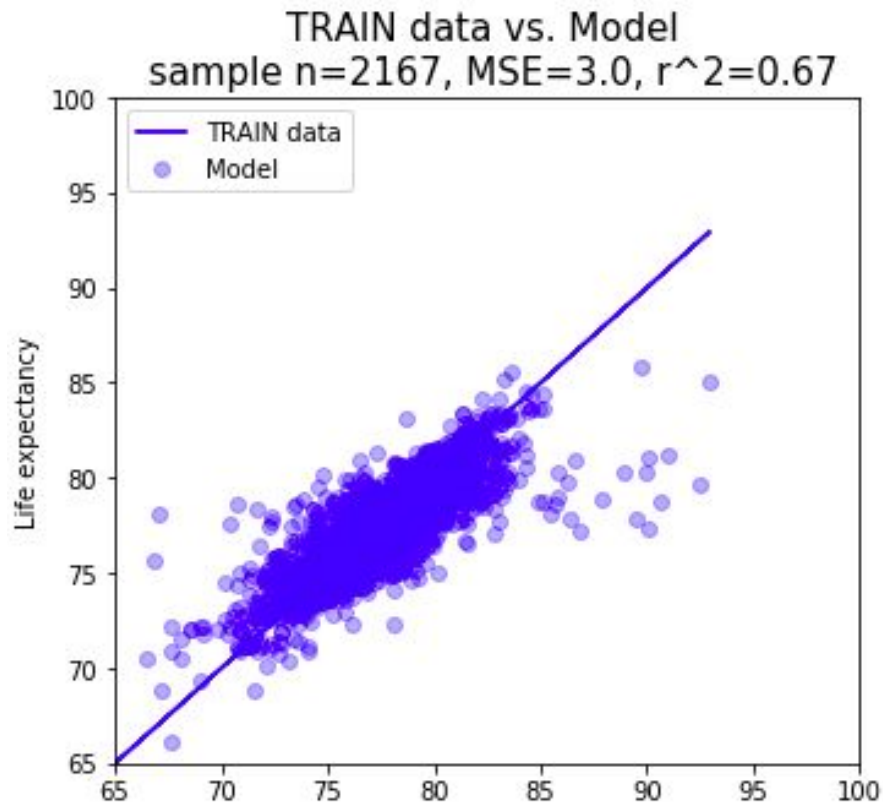
Interactions

Ridge and Lasso

Top contributing factors in final model



Model result and validation



Conclusions



- Teen births, smoking and food insecurity are top contributors to lower life expectancy
- Trade-off between model's accuracy and ability to predict using unseen data input
- The accuracy of our model remains fairly unchanged when applied to new data set

Q & A

