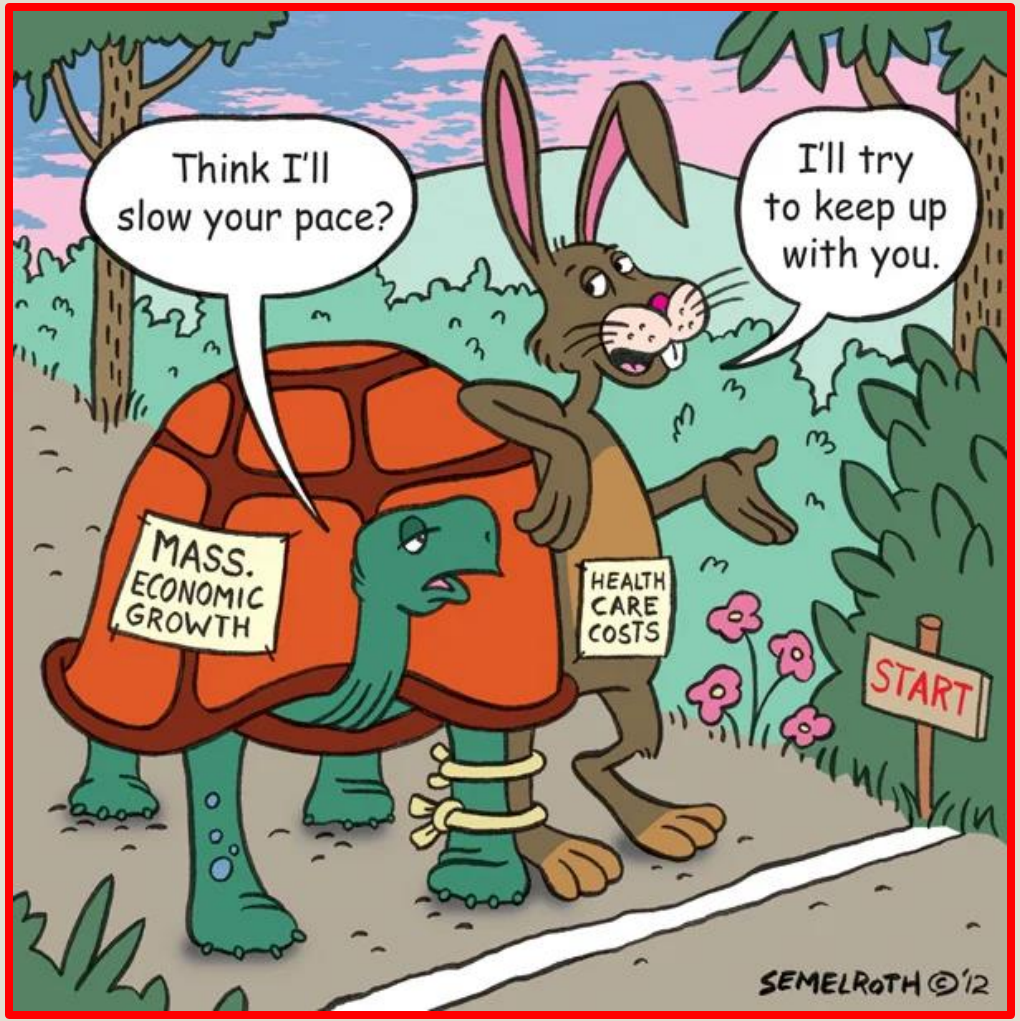
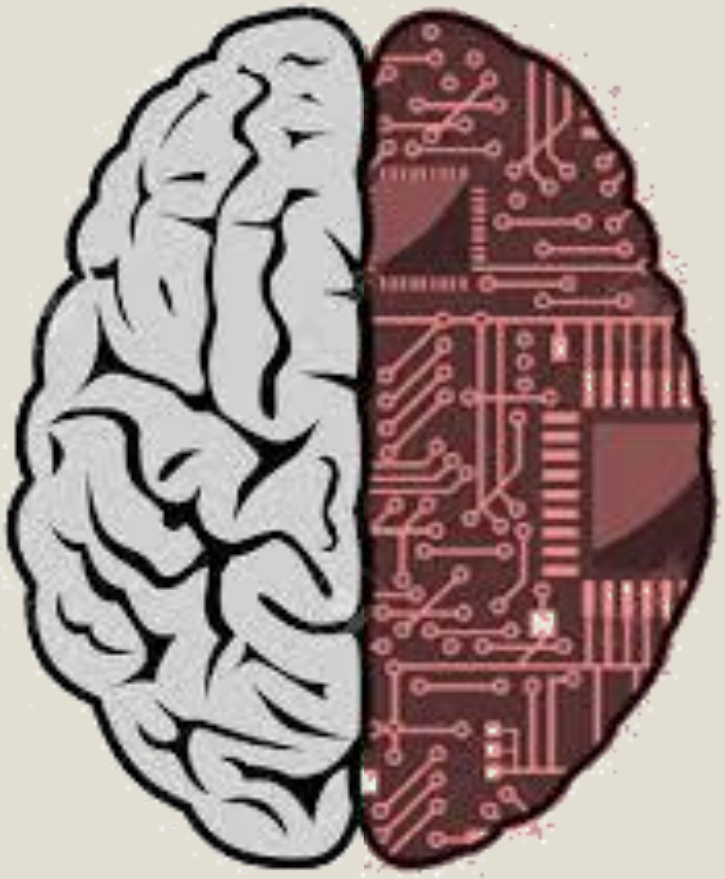
Can Physical Characteristics Predict Health Insurance Costs?

A Predictive Modeling Approach Using Machine

Spending in the U.S. was $4.8 trillion…





Insurers need data-driven tools to manage financial risk.

Who would Benefit

Insurance Analysts & Actuaries

Healthcare Policy Designers

Patients & Policyholders

The Dataset

kaggle

Medical Cost Personal Datasets

Insurance Forecast by using Linear Regression

Data Card | Code (1705) | Discussion (16) | Suggestions (0)

About Dataset

Context

Machine Learning with R by Brett Lantz is a book that provides an introduction to machine learning using R. As far as I can tell, Packt Publishing does not make its datasets available online unless you buy the book and create a user account which can be a problem if you are checking the book out from the library or borrowing the book from a friend. All of these datasets are in the public domain but simply needed some cleaning up and recoding to match the format in the book.

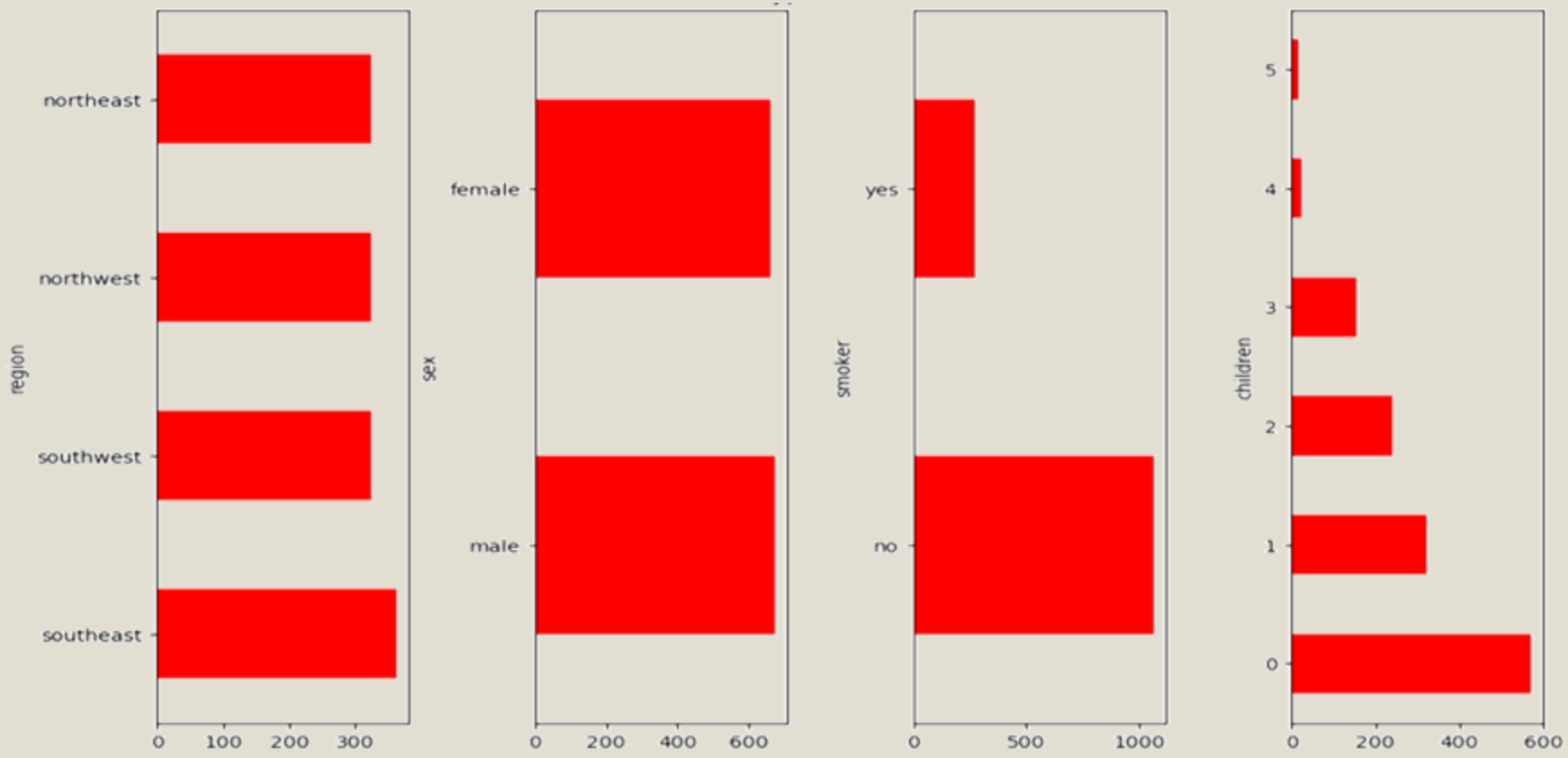
Content

Columns

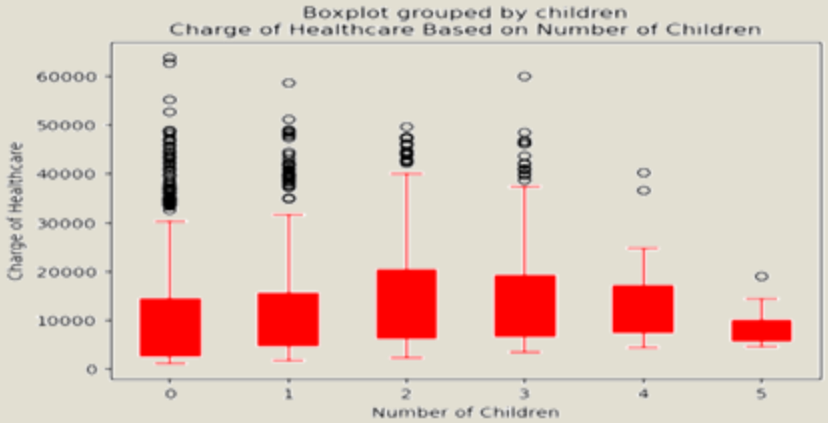
age	sex	bmi	children	smoker	region	charges

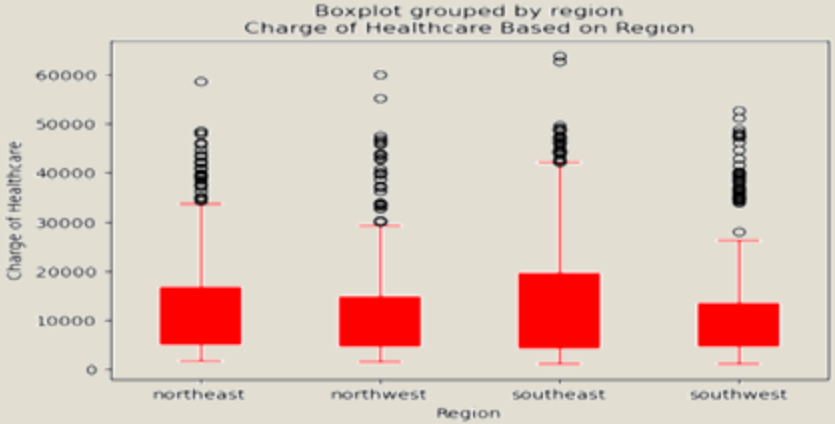
Initial Observations

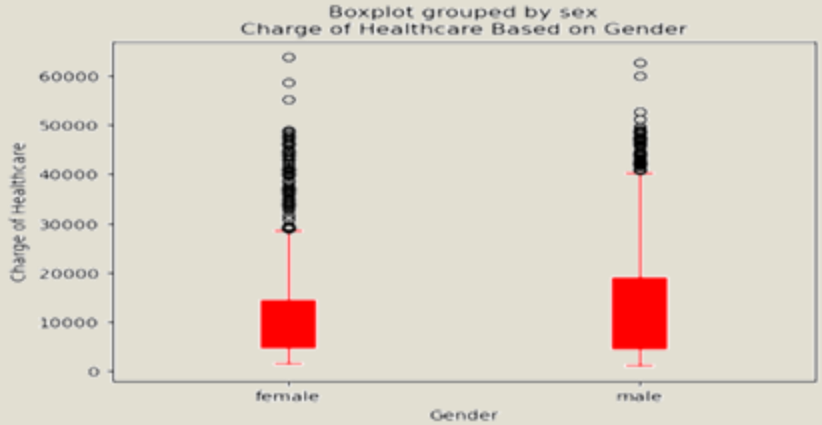
The Number of Individuals in Different Groups

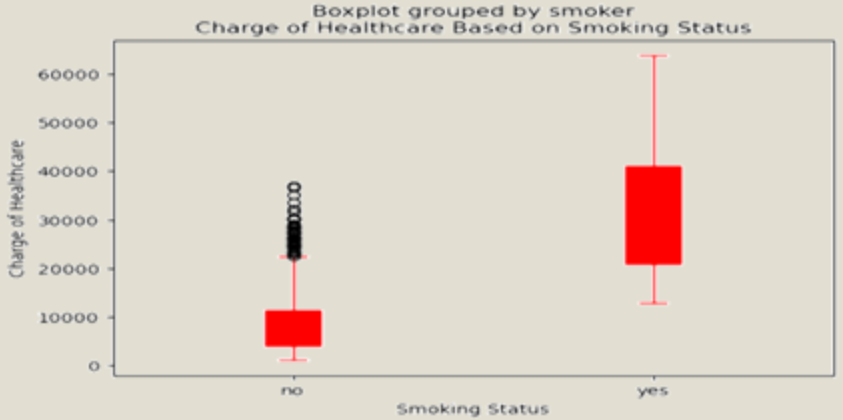


Group Distribution & Cost Spread

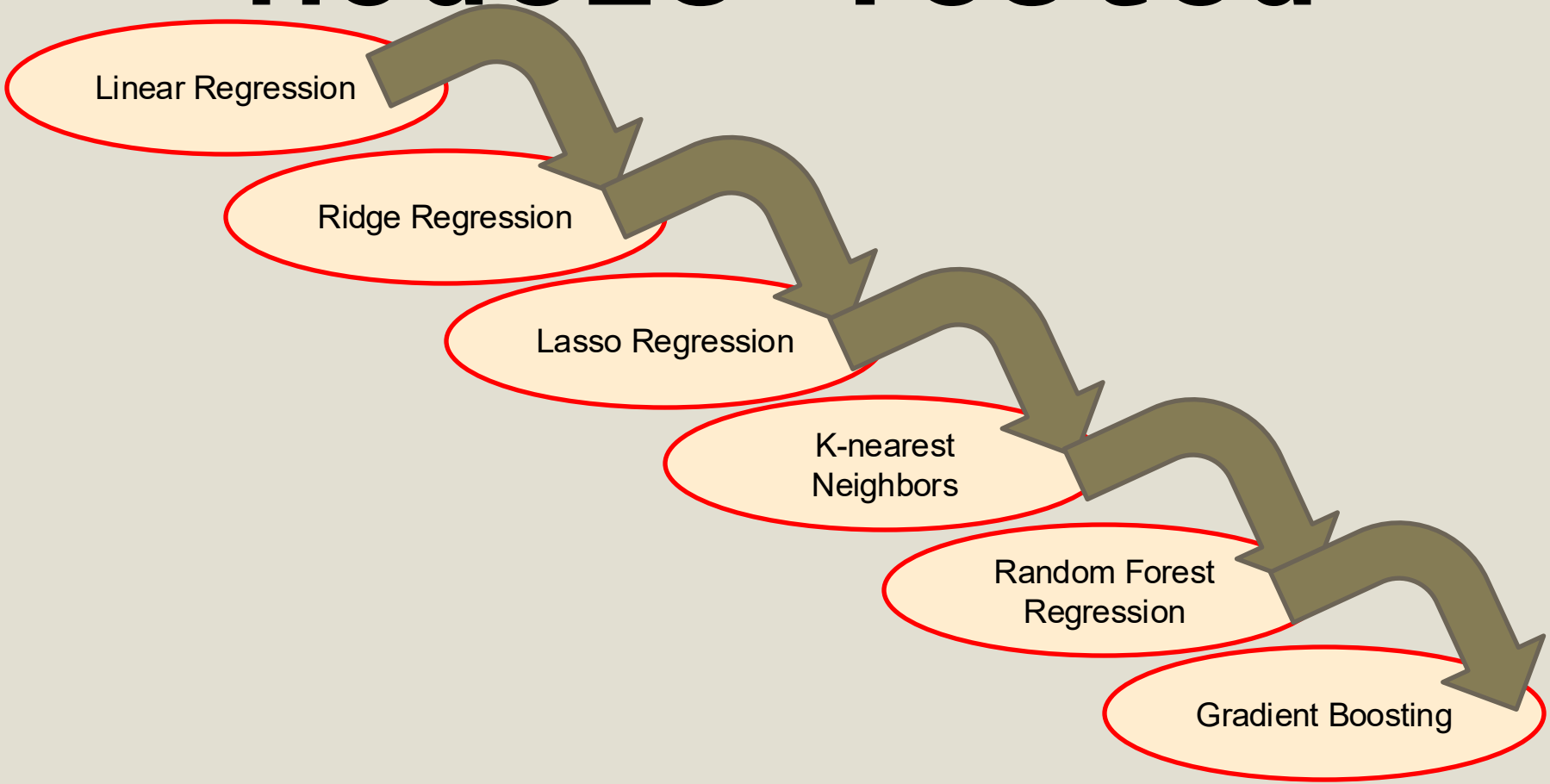




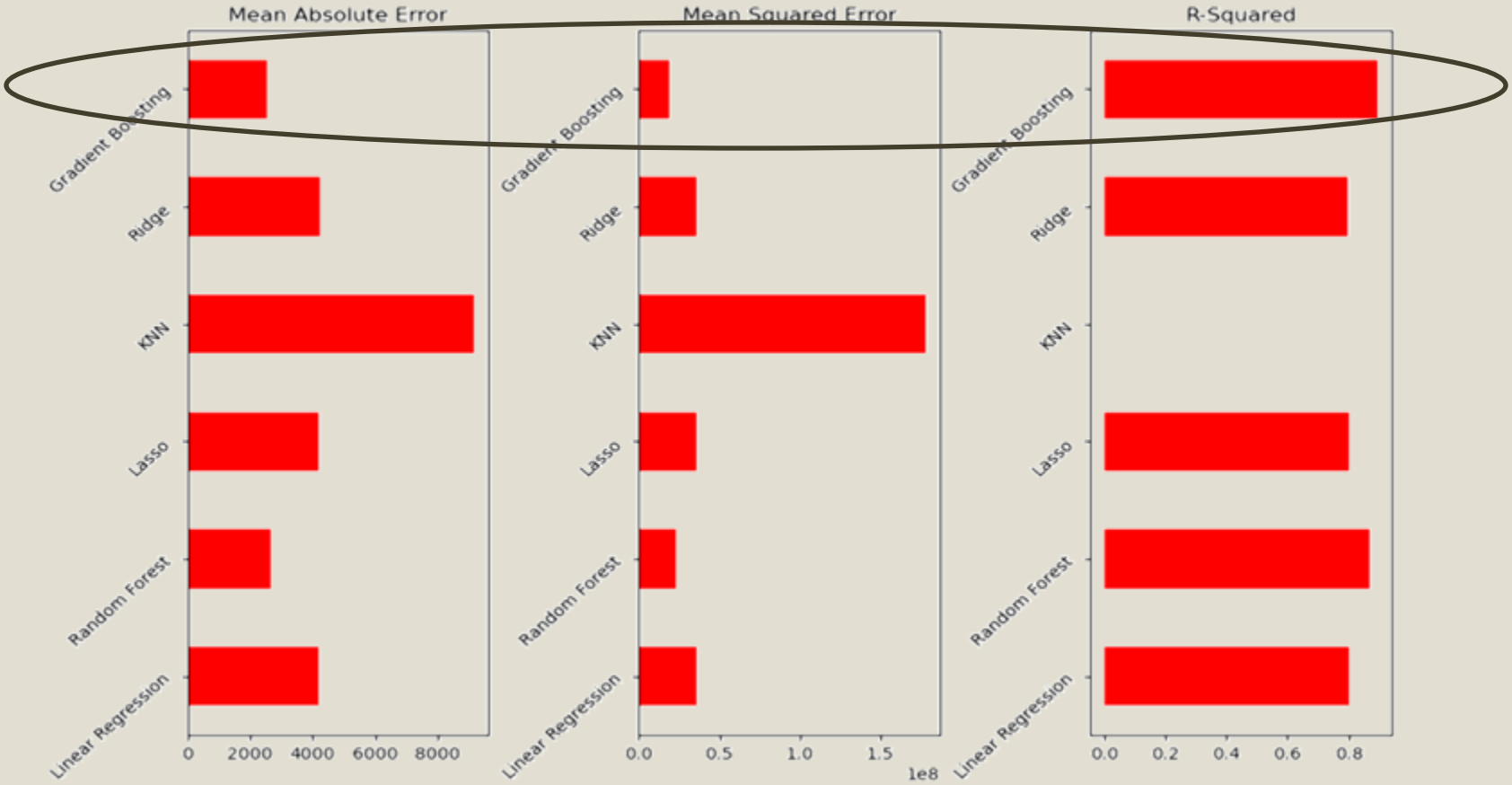




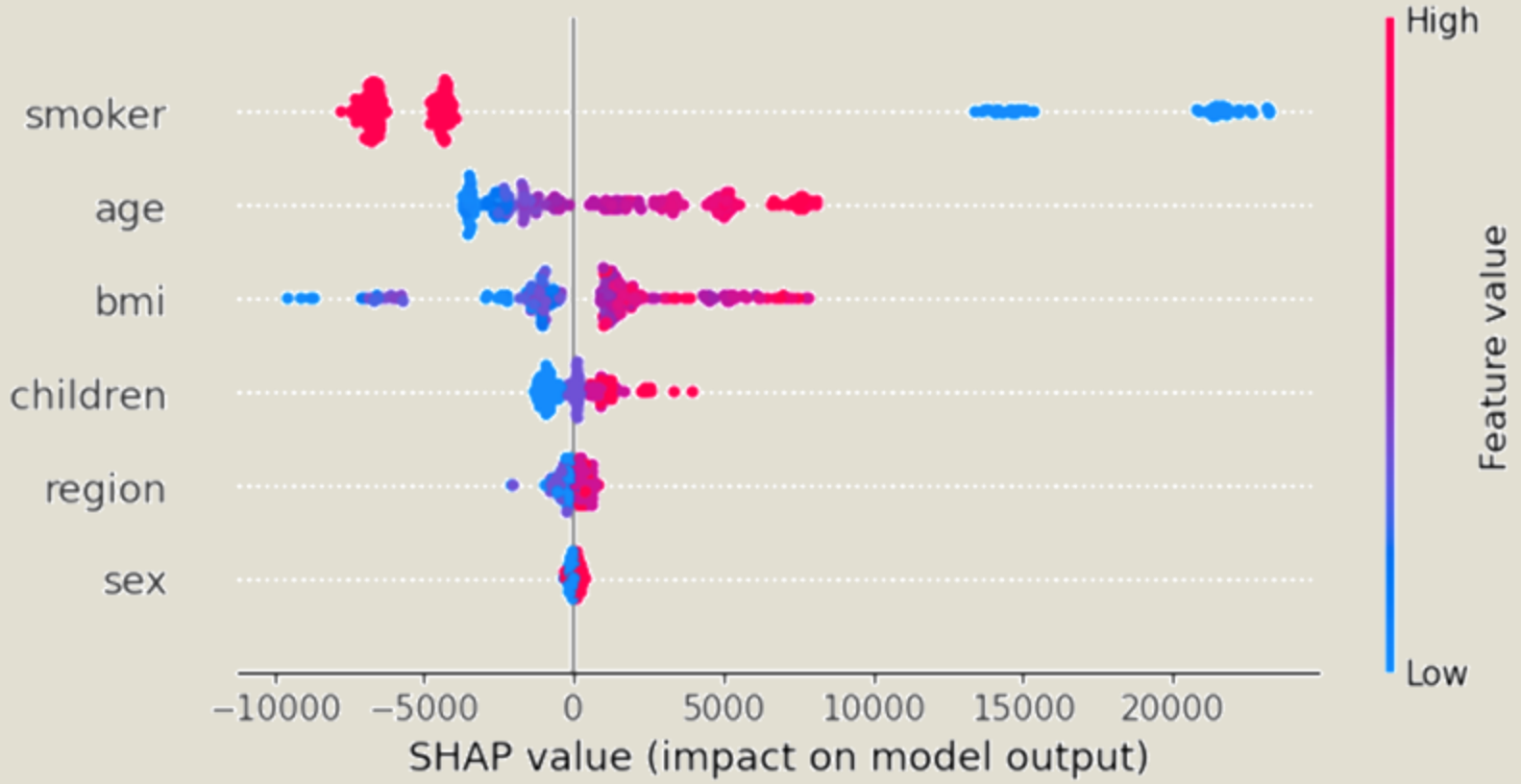
Models Tested



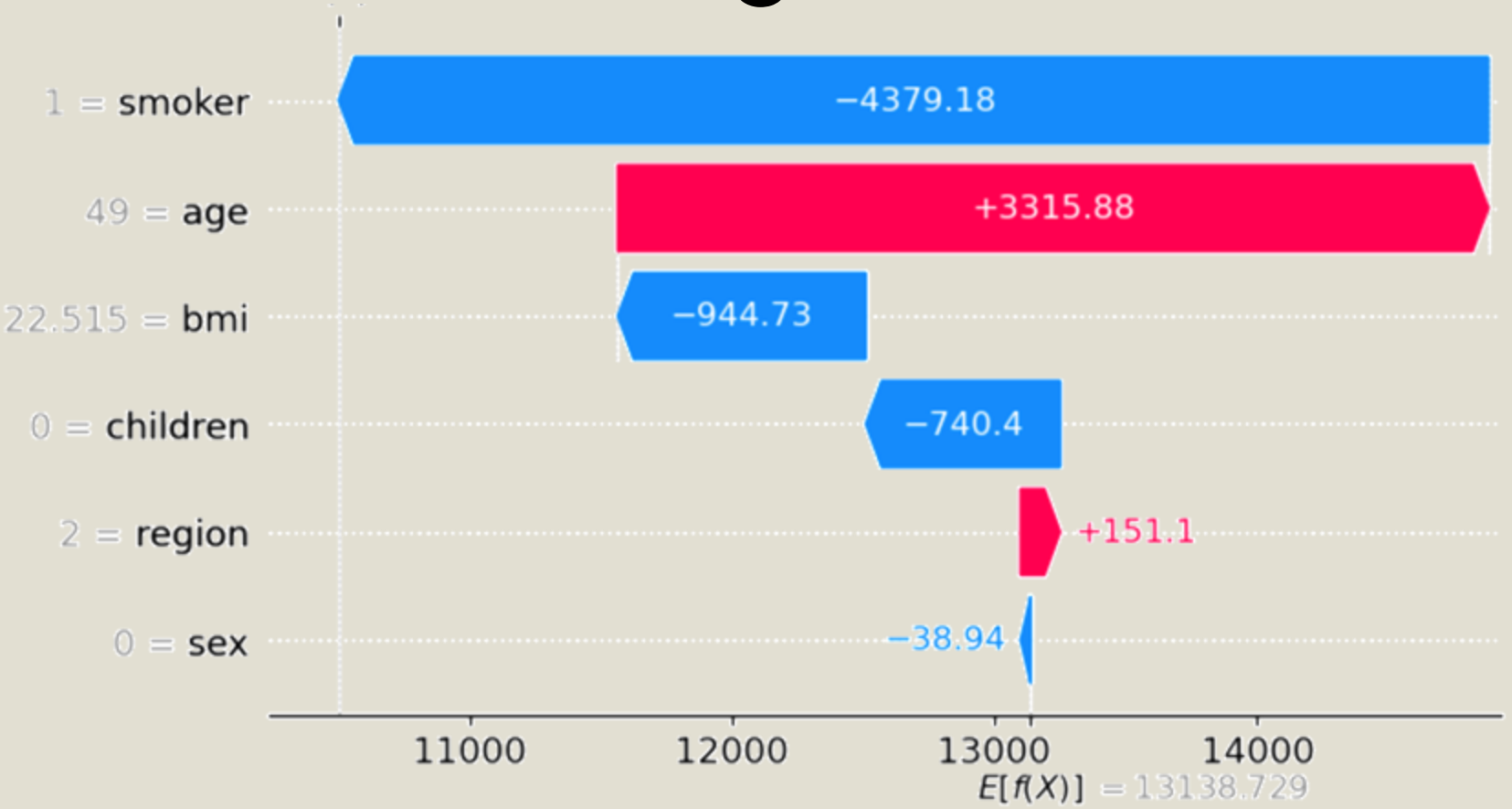
Top Performer: Gradient Boosting



Which Drives Insurance Cost?



Predicting the Cost



Health Care into actionable insights Implications

THANK YOU