CLIENT: Virginia Mason Franciscan Health

Virginia Mason Franciscan is leading Healthcare in Puget Sound Area. “A Mission to Heal, a Promise to Care”

SCOPE: Discharge Barrier Quantification

To implement a model to quantify the discharge barrier categories, to identify the length of stay & certificate the need for more beds.

DATA:

Descriptive Analysis

MDC/DRG Analysis

Quantified and analyzed the relationship between the Age, MDC/DRG with Average of Excess days.

Average of excess days patient

Count by Age (converted into bins)

Diagnostic Analysis

Correlation Heatmap

Find correlated features and determine how they relate to each other as well as the label.

Label Transformation

Explore the ideal distribution for the predictor variable, accounting for data limitations.

Predictive Analysis

CART ANALYSIS_Python

Relative Feature Importance bar graph displaying which features make most impact to the least, as discharge barriers.