# EDA

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The following is the exploratory data analysis completed for Project 2 ("Predicting Re-admission for Diabetic Patients"). To see R code, please view the Rmarkdown file.

### Race vs. Re-admission:

### Distribution of Races

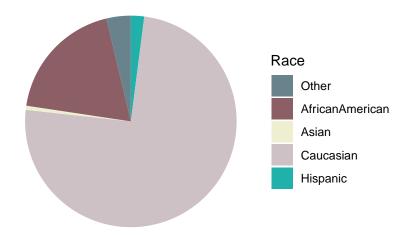


Figure 1: A piechart displaying the distribution of patient's race in entire dataset

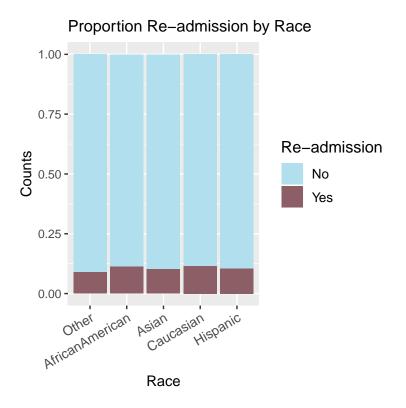


Figure 2: Proportion of readmitted vs. non-readmitted patients in each group

### Gender vs. Re-admission

# Frequency of Re-admission by Gender

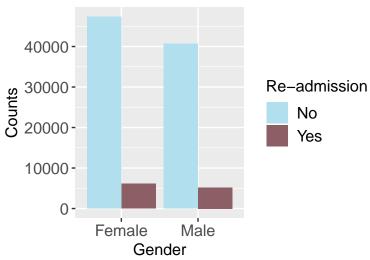


Figure 3: Frequency of re-admission by gender

# Age vs. re-admission

## Distribution of Patients' Age

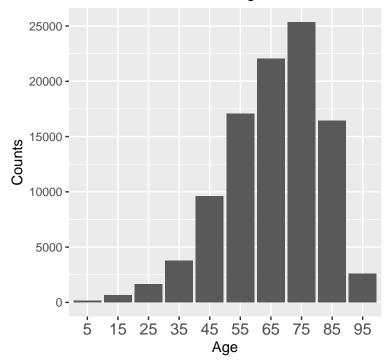


Figure 4: Distribution of patients' age

# Proportion of Re–admission by Age 1.00 0.75 Re–admission No Yes 5 152535455565758595 Age

Figure 5: Proportion of re-admission within each age group

### Medication and Procedures vs. Re-admission

# **Boxplot of Number of Medications**

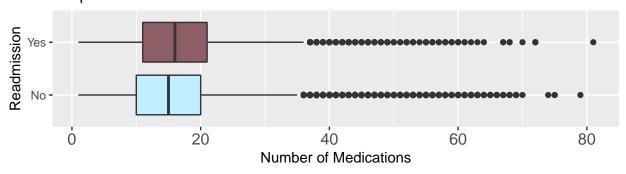


Figure 6: Boxplot of number of medications for each re-admission type

# Boxplot of Total Number of Procedures

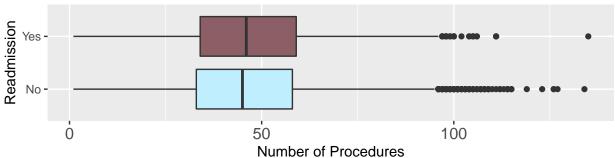


Figure 7: Boxplot of total number of procedures for each re-admission type

### Diagnosis 1, 2, 3, vs. Re-admission

# Readmittance Prop for Most Common Diag 1 (

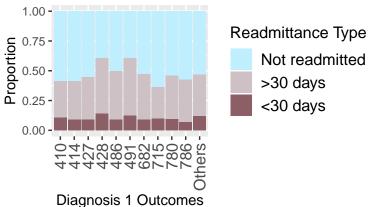


Figure 8: Stacked bargraph of proportion of re-admission for top 10 most frequent outcomes of diagnosis 1

### Readmittance Prop for Most Common Diag 2 (

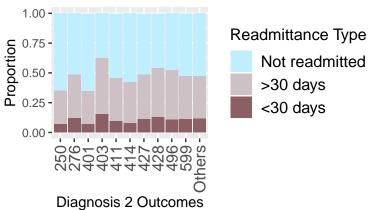


Figure 9: Stacked bargraph of proportion of re-admission for top 10 most frequent outcomes of diagnosis 2

### Readmittance Prop for Most Common Diag 3 (

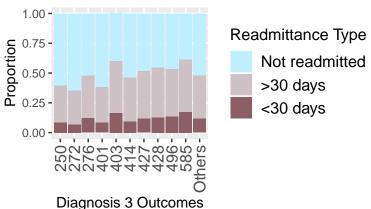


Figure 10: Stacked bargraph of proportion of re-admission for top 10 most frequent outcomes of diagnosis 3