Report created by ... Library on '43903' dataset

January 6, 2025

1 Exploratory Data Analysis Part

1.1 DataTypes and Non-Null Count

Information is in table 1

Table 1: Dataset Columns Information

Column	Non-Null Count	Dtype
race	101766	object
gender	101766	object
age	101766	object
admission_source_id	101766	object
time_in_hospital	101766	uint8
medical_specialty	101766	object
num_lab_procedures	101766	uint8
num_procedures	101766	uint8
num_medications	101766	uint8
primary_diagnosis	101766	object
number_diagnoses	101766	uint8
max_glu_serum	101766	object
A1Cresult	101766	object
insulin	101766	object
change	101766	object
diabetesMed	101766	object
medicare	101766	bool
medicaid	101766	bool
had_emergency	101766	bool
had_inpatient_days	101766	bool
had_outpatient_days	101766	bool
target	101766	int64

1.2 Descriptive Statistics

Information is in table 2

Table 2: Dataset Descriptive Statistics

Statistic	count	mean	std	min	25%	50%	75%	max
time_in_hospital	101766.0	4.4	2.99	1.0	2.0	4.0	6.0	14.0
num_lab_procedures	101766.0	43.1	19.67	1.0	31.0	44.0	57.0	132.0
num_procedures	101766.0	1.34	1.71	0.0	0.0	1.0	2.0	6.0
num_medications	101766.0	16.02	8.13	1.0	10.0	15.0	20.0	81.0
number_diagnoses	101766.0	7.42	1.93	1.0	6.0	8.0	9.0	16.0
target	101766.0	0.11	0.31	0.0	0.0	0.0	0.0	1.0

1.3 Bar Charts for Categorical Columns and Histograms for Numerical Columns
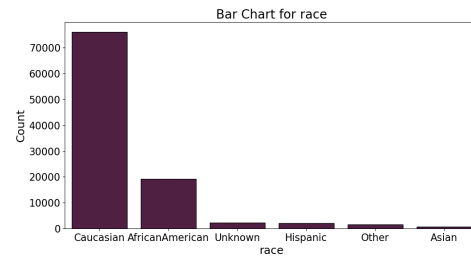
Figure 1: Bar Chart of race
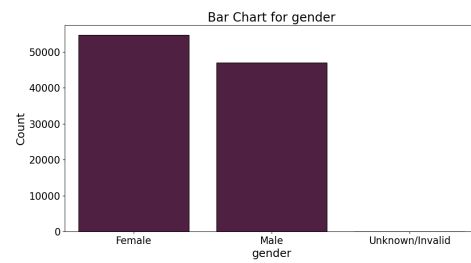
Figure 2: Bar Chart of gender
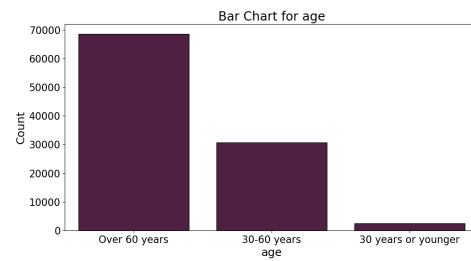
Figure 3: Bar Chart of age
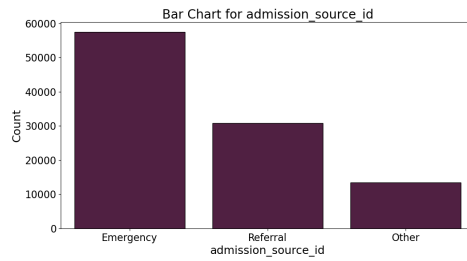
Figure 4: Bar Chart of admission_source_id
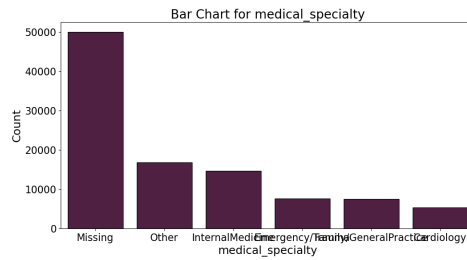
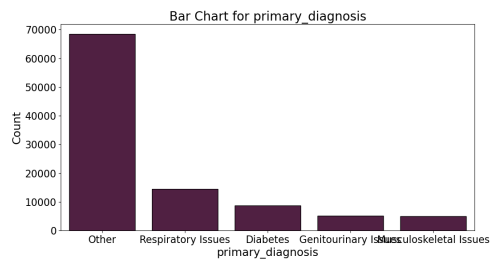Figure 5: Bar Chart of medical_specialty
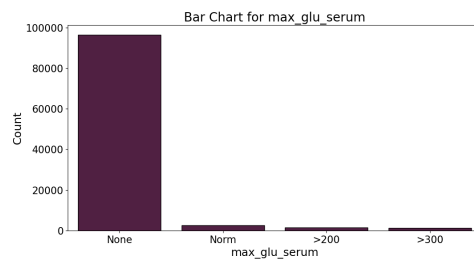

Figure 6: Bar Chart of primary_diagnosis
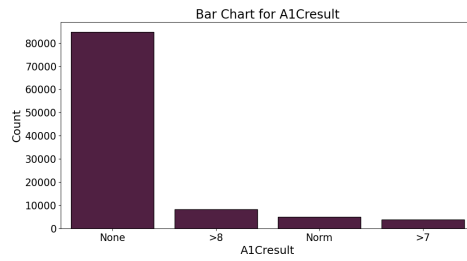

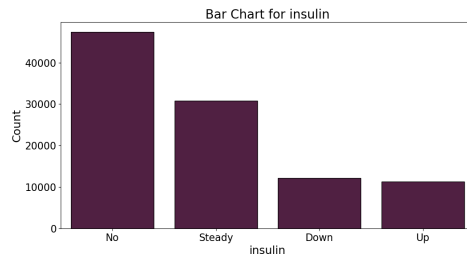Figure 7: Bar Chart of max_glu_serum

Figure 8: Bar Chart of A1Cresult

Figure 9: Bar Chart of insulin
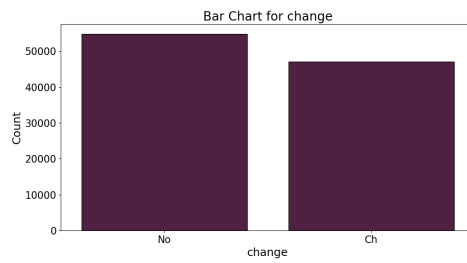
Figure 10: Bar Chart of change
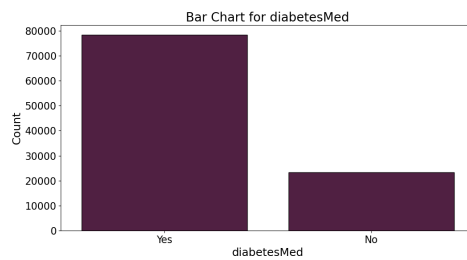
Figure 11: Bar Chart of diabetesMed
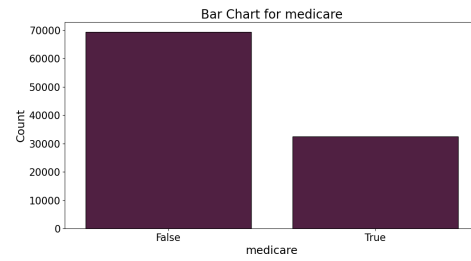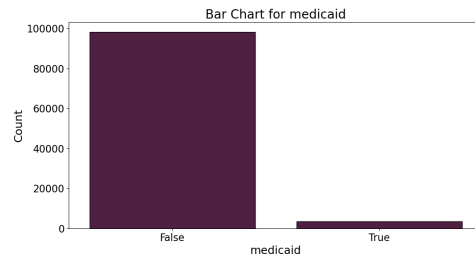
Figure 12: Bar Chart of medicare

Figure 13: Bar Chart of medicaid
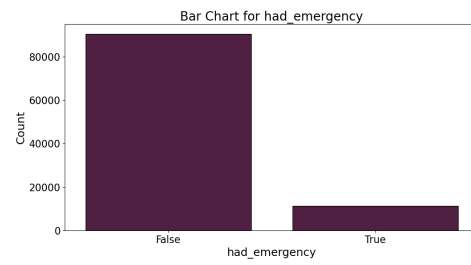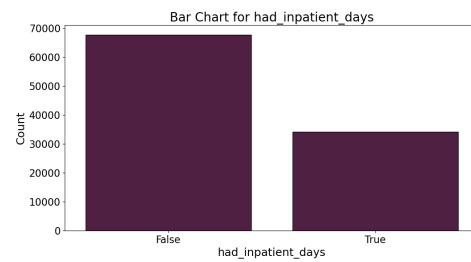

Figure 14: Bar Chart of had_emergency

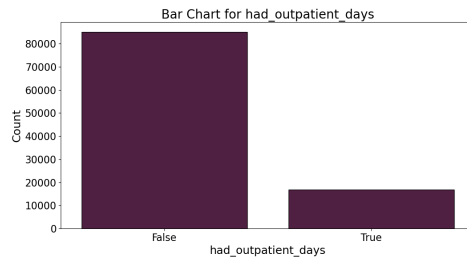Figure 15: Bar Chart of had_inpatient_days

Figure 16: Bar Chart of had_outpatient_days
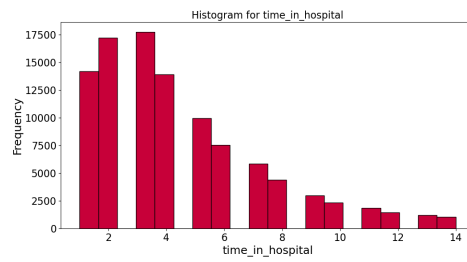

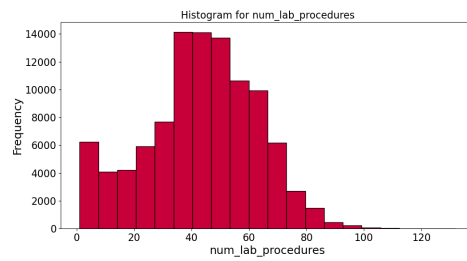Figure 17: Histogram of time_in_hospital

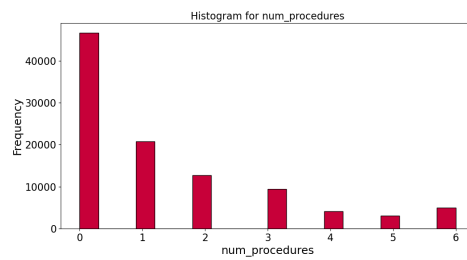Figure 18: Histogram of num_lab_procedures

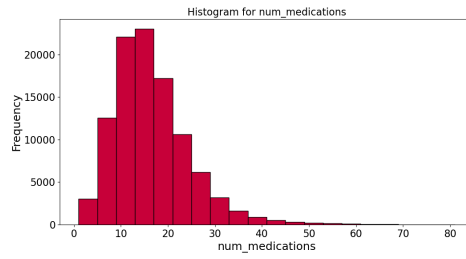Figure 19: Histogram of num_procedures
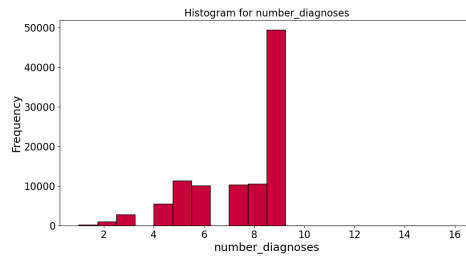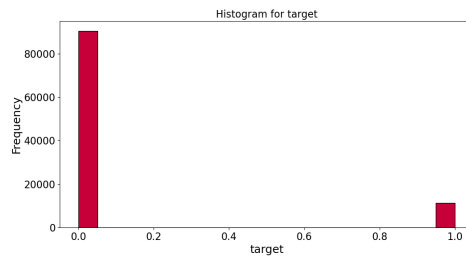
Figure 20: Histogram of num_medications

Figure 21: Histogram of number_diagnoses

Figure 22: Histogram of target