Healthcare Data Analysis Report

Dataset Summary

Total Records	20
Total Features	15
Numeric Features	10
Categorical Features	5

Key Insights

- Age: Average = 51.75, Range = 35.00 to 69.00
- Blood_Pressure_Systolic: Average = 131.65, Range = 118.00 to 148.00
- Blood_Pressure_Diastolic: Average = 82.80, Range = 75.00 to 92.00
- Heart_Rate: Average = 73.70, Range = 68.00 to 82.00
- Body_Temperature: Average = 98.65, Range = 98.40 to 98.90
- Blood_Sugar_Fasting: Average = 107.30, Range = 85.00 to 145.00
- Cholesterol: Average = 198.45, Range = 165.00 to 250.00
- BMI: Average = 25.81, Range = 21.50 to 30.10
- Exercise_Frequency: Average = 2.50, Range = 0.00 to 5.00
- Sleep_Hours: Average = 6.55, Range = 5.00 to 8.00
- Most common Patient_ID: P001 (1 occurrences)
- Most common Gender: M (10 occurrences)
- Most common Medical_Condition: Hypertension (6 occurrences)
- Most common Smoking_Status: Never (11 occurrences)
- Most common Medication: Metformin (3 occurrences)

Recommendations

- Consider handling missing values in the dataset

Visualizations

Correlation Heatmap of Numeric Variables

	Age	Blood_Pressure_Systolic	Blood_Pressure_Diastolic	Heart_Rate	Body_Temperature	Blood_Sugar_Fasting	Cholesterol	BMI	Exercise_Frequency	Sleep_Hours
Age	1	0.98	0.97	0.97	-0.039	0.94	0.96	0.98	-0.88	-0.89
Blood_Pressure_Systolic	0.98	1	0.99	0.97	-0.033	0.94	0.96	0.98	-0.89	-0.89
Blood_Pressure_Diastolic	0.97	0.99	1	0.97	1.1e-14	0.92	0.95	0.97	-0.87	-0.87
Heart_Rate	0.97	0.97	0.97	1	0.055	0.95	0.98	0.97	-0.84	-0.84
Body_Temperature	-0.039	-0.033	1.1e-14	0.055	1	0.15	0.037	-0.0089	0.26	0.019
Blood_Sugar_Fasting	0.94	0.94	0.92	0.95	0.15	1	0.93	0.95	-0.85	-0.88
Cholesterol	0.96	0.96	0.95	0.98	0.037	0.93	1	0.96	-0.84	-0.84
BMI	0.98	0.98	0.97	0.97	-0.0089	0.95	0.96	1	-0.9	-0.88
Exercise_Frequency	-0.88	-0.89	-0.87	-0.84	0.26	-0.85	-0.84	-0.9	1	0.86
Sleep_Hours	-0.89	-0.89	-0.87	-0.84	0.019	-0.88	-0.84	-0.88	0.86	1

Distribution of Age

Count vs Age

Distribution of Blood_Pressure_Systolic

Distribution of Blood_Pressure_Diastolic

Distribution of Heart_Rate

Distribution of Body_Temperature

Distribution of Blood_Sugar_Fasting

Distribution of Cholesterol

Distribution of BMI

Distribution of Exercise_Frequency

Distribution of Sleep_Hours

Age by Gender

Age by Medical_Condition

Age by Smoking_Status

Age by Medication

Blood_Pressure_Systolic by Gender

Blood_Pressure_Systolic by Medical_Condition

Blood_Pressure_Systolic by Smoking_Status

Blood_Pressure_Systolic by Medication

Blood_Pressure_Diastolic by Gender

Blood_Pressure_Diastolic by Medical_Condition

Blood_Pressure_Diastolic by Smoking_Status

Blood_Pressure_Diastolic by Medication

Heart_Rate by Gender

Heart_Rate by Medical_Condition

Heart_Rate by Smoking_Status

Heart_Rate by Medication

Body_Temperature by Gender

Body_Temperature by Medical_Condition

Body_Temperature by Smoking_Status

Body_Temperature by Medication

Blood_Sugar_Fasting by Gender

Blood_Sugar_Fasting by Medical_Condition

Blood_Sugar_Fasting by Smoking_Status

Blood_Sugar_Fasting by Medication

Cholesterol by Gender

Cholesterol by Medical_Condition

Cholesterol by Medical_Condition

Cholesterol by Smoking_Status

Cholesterol by Smoking_Status

Cholesterol by Medication

BMI by Gender

BMI by Medical_Condition

BMI by Smoking_Status

BMI by Medication

Exercise_Frequency by Gender

Exercise_Frequency by Medical_Condition

Exercise_Frequency by Smoking_Status

Exercise_Frequency by Medication

Sleep_Hours by Gender

Sleep_Hours by Medical_Condition

Sleep_Hours by Smoking_Status

Sleep_Hours by Medication

Distribution of Patient_ID

Distribution of Gender

Distribution of Medical_Condition

Distribution of Smoking_Status

Distribution of Medication