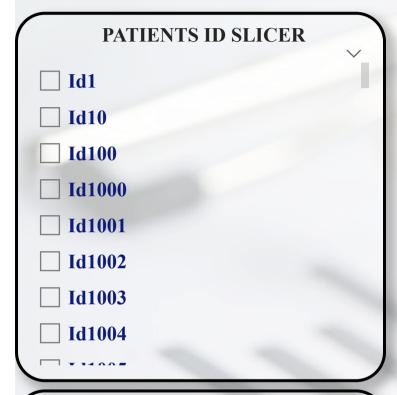
# CLINICAL HEALTHCARE DATA ANALYSIS AND INSIGHTS

# **Project Summary:**

The healthcare industry generates massive amounts of data daily, offering invaluable opportunities for healthcare providers and policymakers to enhance patient care, optimize resource allocation, and control healthcare costs. This project focuses on analyzing a comprehensive healthcare dataset, which includes medical examinations, hospitalization records, and patient profiles. The goal is to extract meaningful insights into patient health trends, medical histories, and associated healthcare costs. By rigorously cleaning, transforming, and exploring the data, we aim to uncover patterns and relationships between key health metrics. This analysis will help identify trends in healthcare utilization, disease prevalence, and cost variations across different patient demographics. The insights derived from this project will support healthcare stakeholders in making informed decisions to improve patient outcomes, design cost-effective care models, and allocate resources more efficiently. Through data-driven visualizations and thorough analysis, this project will deliver actionable recommendations for enhancing healthcare delivery and policy formulation.



# PATIENTS MEDICAL EXAMINATION



PATIENTS WITH CANCER HISTORY

2

**Count of Cancer history** 

PATIENTS UNDERGONE TRANSPLANTS

144

**Count of Any Transplants** 

AVERAGE BMI PATIENTS WITH 3 MAJOR SURGERIES

32.98

**Average of BMI** 

OBESITY PATIENTS WITH HEART ISSUE

**500** 

**Count of Heart Issues** 

AVERAGE HBA1C PATIENTS WITH SMOKER

6.62

**Average of HBA1C** 

PATIENTS WITH DIABETES

797

**Count of Diabetes Status** 

2335

TOTAL PATIENTS IN DATASET

**Count of Customer ID** 

PATIENTS TOTAL
NUMBER OF MAJOR
SURGERIES

1579

Sum of NumberOfMajorS...

PATIENTS WITH HEART ISSUES AND DONE TRANSPLANTS

19

**Count of Heart Issues** 

PATIENTS WITH OBESITY

1221

**Count of BMI** 

## PATIENTS HOSPITALIZATION DETAILS

SUMMARY STATISTICS FOR CHARGES

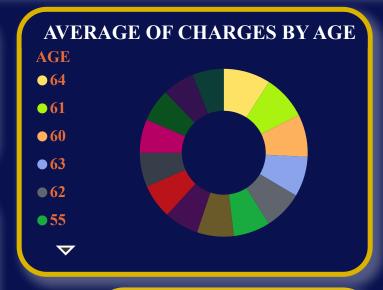
13.54K

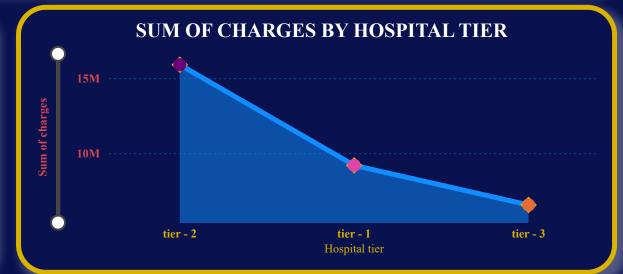
Average of charges

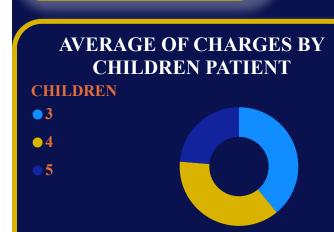
MEDIAN AGE OF PATIENTS

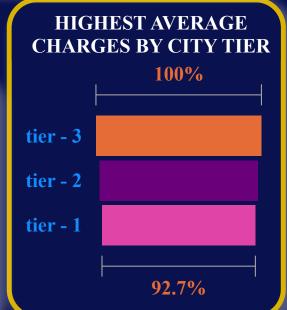
39

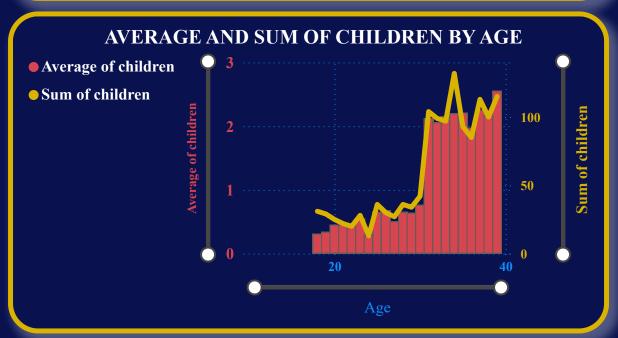
**Median of Age** 













## HEALTHCARE TRENDS AND ANALYTICS

### **COUNT OF CANCER** HISTORY BY SMOKER



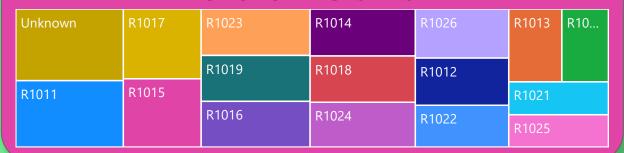
smoker

- No
- yes

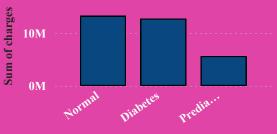
## **SUM OF CHARGES BY WEIGHT STATUS**



#### AVERAGE OF CHARGES BY STATE ID



#### **SUM OF CHARGES BY DIABETES STATUS**



**Diabetes Status** 

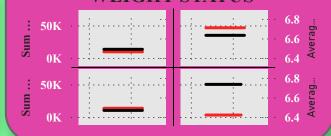
#### AVERAGE OF HBA1C BY **ANY TRANSPLANTS**



Any T...

- No
- ves

#### SUM OF BMI AND AVERAGE OF HBA1C BY AGE AND **WEIGHT STATUS**



### SUM OF NUMBER OF **ANY MAJOR SURGERIES** BY ANY TRANSPLANT

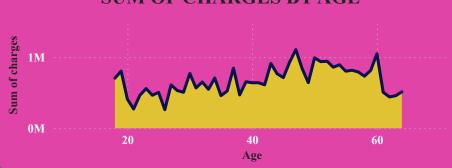


Any T...

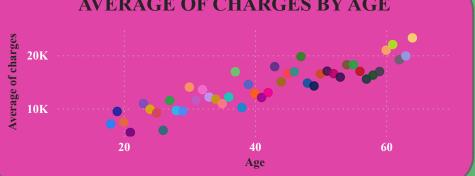
No

ves

#### **SUM OF CHARGES BY AGE**



#### **AVERAGE OF CHARGES BY AGE**



## **AVERAGE OF CHARGES** BY HOSPITAL TIER

