



## **Project Title:**

# **Healthcare Data Analysis: Patterns in Patient Admissions**



## **Objective:**

To analyse a healthcare dataset consisting of **55,500** patient admission records and extract actionable insights into:

- Common medical conditions
- Hospital admission types
- Preferred doctors and hospitals
- Insurance coverage patterns
- Patient demographics and stay durations




## **Target Audience:**

- Hospital administrators
- Health insurance analysts
- Public health researchers
- Data Analyst portfolio reviewers



## DATASET OVERVIEW

- **Rows:** 55,500
- **Columns:** 15
- **Missing Values:** None 
- **Key Columns:**
  - Age, Gender, Medical Condition
  - Date of Admission, Discharge Date, Admission Type
  - Doctor, Hospital, Insurance Provider
- **Sample Features:**
  - Patient journeys from admission to discharge
  - Treatment details and diagnoses

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## **EXPLORATORY DATA ANALYSIS DONE (From Notebook)**

The EDA notebook includes:

### **1. Descriptive Analysis**

- Age and gender distributions
- Top 10 most frequent medical conditions

### **2. Time-Based Trends**

- Admissions by month
- Stay duration analysis (from Date of Admission to Discharge Date)

### **3. Hospital & Doctor Analysis**

- Patient count per doctor
- Top doctors and their billing stats

### **4. Billing & Insurance Insights**

- Preferred insurances opted by patients
- Comparative analysis of insurance providing companies.

### **5. Visualizations**

- Line chart
- Pie Chart
- Bar charts for categorical fields