**DATA STORYSTELLING FOR HOSPITAL TRANSACTION(REVENUE)**

**PROBLEM STATEMENT**

The primary goal of this dashboard is to evaluate the financial performance and operational efficiency of a hospital. It aims to identify revenue streams, expenses, and profit margins across different specialties, procedures, and patient demographics to enhance decision-making and resource allocation.

**DATA EXPLORATION AND ANALYSIS**

 **Financial Metrics**:

* Total Revenue: $274K
* Total Expenses: $189K
* Total Profit: $84K
* Profit Margin: 30.8%

 **Operational Metrics**:

* Number of Doctors: 81
* Number of Patients: 86

 **Revenue Trends**:

* Revenue fluctuates over quarters, with notable peaks in Q2 and Q3 of 2022 ($44K and $38K respectively).
* Significant decline in revenue in Q2 and Q3 of 2023 ($15K and $9K).

 **Revenue by Specialty**:

* Dermatology ($68K), Cardiology ($61K), and Neurology ($59K) lead in revenue generation.
* Pediatrics ($24K) is the lowest-performing specialty.

 **Revenue by Category**:

* Dermatology ($39K) and Radiology ($37K) generate the highest revenue.
* General Medicine ($21K) is the least profitable.

 **Procedure-Level Analysis**:

* Skin Biopsy ($38.6K) and Heart Bypass Surgery ($31.1K) have the highest revenue and profit margins (31.4% and 31.5%).
* General Checkup has the lowest revenue ($14.5K).

**KEY INSIGHTS AND RECOMMENDATIONS**

* **Focus on High-Performing Specialties**: Invest in Dermatology, Cardiology, and Neurology to maximize profit.
* **Improve Low-Performing Areas**: Analyze the underlying factors for low revenue in Pediatrics and General Medicine.
* **Cost Management**: Review expense-heavy procedures like MRI Scan to improve margins.

 **Increase Patient Volume**: Strategies to attract more patients, such as marketing campaigns or partnerships with insurance providers.

 **Monitor Seasonal Trends**: Understand reasons behind the revenue dip in 2023 and address external or internal factors affecting performance.

**VISUALIZATION AND DASHBOARD FEATURES**

* **KPI Cards**: For quick insights into revenue, expenses, profit, and profit margin.
* **Line Chart**: Visualizes revenue trends over quarters.
* **Bar Charts**: Show revenue by specialty and category for better comparison.
* **Detailed Table**: Analyzes revenue, expenses, profit margin, and transaction count by procedure.
* **Filters for Demographics**: Allows deep dives into gender, state, and year-wise performance.

**CONCLUSION**

The dashboard effectively highlights the hospital's financial performance and operational efficiency. By leveraging high-revenue specialties and managing costs in underperforming areas, the hospital can optimize profitability and improve patient care.