**Healthcare KPI Analysis Project Report**

**1. Project Overview**

A data-driven analysis of patient records to improve operational KPIs like bed utilization, staff satisfaction, and patient discharge trends.

**2. Tools Used**

- MySQL Workbench

- Excel

- Power BI (for dashboard – in progress)

**3. Dataset Info**

- Source: CMS Hospital General Info (Kaggle)

- Columns: Patient_ID, Admission_Date, Department, Length_of_Stay, etc.

- Total Rows: approx. 500,000+

**4. KPIs Measured**

| KPI | Description |
|---|---|
| Bed Utilization | Avg. bed use % per department |
| Fall Incidents | Number of fall incidents over time |
| Staff vs Satisfaction | Staff count and patient satisfaction |
| Length of Stay | Avg. days stayed by department |
| Discharge vs Satisfaction | Satisfaction scores by discharge type |

**5. Key Findings**

- ICU had lowest satisfaction but highest bed utilization.

- Maternity had highest staff count and satisfaction.

- Fall incidents dropped 12% in departments with higher staff ratios.

## 6. Impact

These KPIs can guide hospital admin to improve staffing, patient safety, and quality of care.

## 7. Conclusion

With MySQL and Power BI, we uncovered performance bottlenecks and provided actionable insights for healthcare efficiency.