**HOSPITAL EMERGENCY ROOM DASHBOARD**

**BUSINESS REQUIREMENTS**

**KPI’s Requirements**

**To enhance operational efficiency and provide actionable insights into emergency room performance, we need to create a Hospital Emergency Room Analysis Dashboard in Power BI. This solution will enable stakeholders to track, analyse, and make data-driven decisions regarding patient management and service optimization.**

* **Number of Patients:**

**Measure the total number of patients visiting the ER daily.**

**Display a daily trend using an area sparkline to understand patterns over time, such as peak days or seasonal trends.**

* **Average Wait Time:**

**Calculate the average time patients wait before being attended to by a medical professional.**

**Use an area sparkline to show daily fluctuations and identify days with higher wait times that may require operational adjustments.**

* **Patient Satisfaction Score:**

**Analyse the average satisfaction score of patients daily to evaluate the quality of service provided.**

**Present a daily trend using an area sparkline to identify dips in satisfaction and correlate them with operational challenges or peak times.**

* **Number of Patients Referred:**

**Count the number of patients referred to specific departments from the ER each day.**

**Use an area sparkline to track daily trends and identify departments with high referral rates, which may require additional resources.**

**DASHBOARDS**

1. **Monthly View**
2. **Consolidated View**
3. **Patient Details**
4. **Key Takeaways**

* **DASHBOARD 1: MONTHLY VIEW**

**Objective: Monitor key metrics and trends on a month-by-month basis to identify patterns and areas for improvement.**

**Charts to Develop:**

* **Patient Admission Status: Track admitted vs. non-admitted patients.**
* **Patient Age Distribution: Group patients by 10-year age intervals.**
* **Department Referrals: Analyze referral trends across different departments.**
* **Timeliness: Measure the percentage of patients seen within 30 minutes.**
* **Gender Analysis: Visualize patient distribution by gender.**
* **Racial Demographics: Analyze patient data by race.**
* **Time Analysis: Assess patient volume by day and hour.**
* **DASHBOARD 2: CONSOLIDATED VIEW**

**Objective: Provide a holistic summary of hospital performance for a selected date range.**

**Charts to Develop:**

* **Similar metrics as the Monthly View but aggregated over a customizable date range for broader insights and trend analysis.**
* **DASHBOARD 3: PATIENT DETAILS**

**Objective: Offer granular insights into patient-level data to enable detailed analysis and troubleshooting.**

**Charts to Develop: A grid displaying essential fields:**

* **Patient ID**
* **Patient Full Name**
* **Gender**
* **Age**
* **Admission Date**
* **Patient Race**
* **Wait Time**
* **Department Referral**
* **Admission Status**
* **DASHBOARD 4: KEY TAKEAWAYS**

**Objective:** **Summarize the findings from all dashboards to provide clear and actionable insights for stakeholders.**

**Charts to Develop:**

* **Descriptive analysis of each metric and visualization, including patterns, anomalies, and actionable recommendations to optimize emergency room operations and patient care.**