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Aim:

Create basic charts using Power BI to visualize hospital work and leads workflow.

- **Basic Charts:** Bar chart, Pie chart, Histogram, Line chart, Scatter plot, Bubble chart.
- **Write observations from each chart** to analyze hospital performance, occupancy, diagnosis types, billing, and insurance trends.

Objectives:

- To apply data visualization techniques in Power BI.
- To create various types of charts to understand key insights such as bed occupancy, doctor feedback, diagnosis distribution, and billing vs insurance analysis.
- To interpret the data through visual representations in the dashboard.

Chart Types & Steps:

1. Bar Chart: Bed Occupancy by Bed Type

Steps:

- Select "Bar Chart" visual.
- X-axis: **Bed Type** (Private, General, ICU).
- Y-axis: Count of **Bed Occupancy**.

2. Observation:

Shows the distribution of patients across different bed types, helping identify the most utilized bed category.

3. Pie Chart: Feedback Volume for Doctors

Steps:

- Select "Pie Chart" visual.
- Values: Count of feedback volume.
- Legend: **Doctor Name**.

4. Observation:

Displays the proportion of feedback for each doctor, helping understand which doctors receive the most feedback from patients.

5. Histogram: Diagnosis Type Distribution

Steps:

- Use the "Stacked Column Chart" visual to simulate a histogram.
- X-axis: **Diagnosis Type**.
- Y-axis: Count of each diagnosis.

6. Observation:

Highlights the frequency of each diagnosis type, showing which medical conditions are most common.

7. Line Chart: Billing Amount vs Health Insurance Amount by Diagnosis

Steps:

- Select "Line Chart" visual.
- X-axis: **Diagnosis Type**.
- Y-axis: **Billing Amount, Health Insurance Amount**.

8. Observation:

Compares the hospital's billing amount against the insurance claims for each diagnosis, revealing trends in patient costs and insurance coverage.

9. Scatter Plot: Billing Amount vs Health Insurance for Specific Diagnoses

Steps:

- Select "Scatter Chart" visual.
- X-axis: **Billing Amount**.
- Y-axis: **Health Insurance Amount**.
- Details: **Diagnosis Type**.

10. Observation:

Helps visualize the relationship between the billing amount and the amount covered by insurance for various diagnoses.

11. Bubble Chart: Patient Feedback and Occupancy

Steps:

- Use the "Scatter Chart" visual.
- X-axis: Count of **Feedback**.
- Y-axis: **Bed Occupancy**.
- Size: **Billing Amount**.

12. Observation:

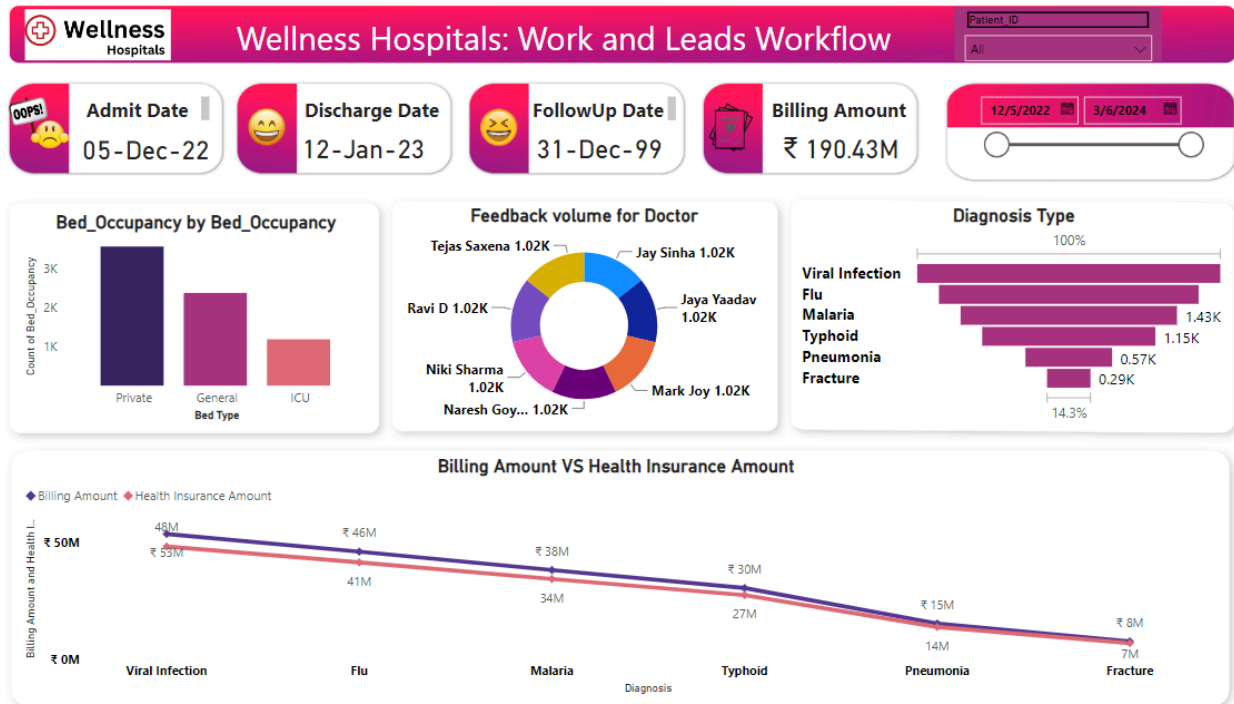
A three-dimensional view of feedback volume, bed occupancy, and billing. Larger bubbles indicate higher billing amounts, helping to identify trends.

Outcomes:

- Created multiple types of charts using Power BI to visualize hospital workflows and data.
- Derived insights into bed occupancy, doctor performance, diagnosis types, billing, and insurance trends.

- Enhanced understanding of how different chart types can present data for healthcare operations analysis.

DashBoard:



Conclusion:

This dashboard effectively showcases the power of visual data representation in healthcare management. By using Power BI, hospital performance, diagnosis trends, and financial insights can be easily interpreted, aiding decision-making processes.