Healthcare Provider Dashboard – Power BI Portfolio Project

Background & Overview

This project explores healthcare billing data across 2024 and 2025 using Power BI. The primary objective is to offer actionable insights to healthcare providers, administrators, and finance departments. The dashboard evaluates patient race, procedure types, departmental billing, diagnosis, and service type breakdowns.

Key Areas Analyzed

- Procedure Billing Trends (X-Ray, CT Scan, MRI, etc.)

- Diagnosis Distribution (Asthma, Hypertension, etc.)

- Department Performance (Cardiology, Orthopedics, etc.)

- Race and Demographic Billing

- Year-over-Year Cost Breakdown

Insights & Recommendations

Insight Area	Key Findings	Recommendations
Appointment Trends & Wait Times	Long wait times in high-demand departments	Implement smarter scheduling and staffing models to reduce delays and improve patient satisfaction.
Billing & Revenue	Majority of revenue comes from a few high-billing procedures	Focus financial planning on high-performing services and streamline claims for quicker reimbursement.
Provider & Department Performance	Variation in provider efficiency and outcomes	Use performance dashboards to conduct targeted reviews and provide performance-based support or training.
Procedure Utilization	Frequent low-value procedures observed	Review and adjust treatment protocols to reduce unnecessary costs and improve care effectiveness.
Regional Insights	Facilities with high inflow but underwhelming performance	Evaluate resource allocation, infrastructure, and staff capacity for specific underperforming locations.

Stakeholder Impact

Stakeholder	Impact
Operations Managers	Better scheduling efficiency, reduced bottlenecks
Finance Teams	Deeper visibility into revenue sources and claim patterns
Clinical Directors	Actionable provider-level and department-level insights
Executives & Admins	Strategic facility investment planning
Patients	Shorter wait times, better quality of care through data-informed decisions