⊕ Healthcare Power BI Dashboard Report

Objective

The objective of this dashboard is to provide hospital management teams with a comprehensive, interactive, and data-driven tool to monitor patient visits, instrument availability, revenue trends, waiting times, and patient feedback. This enables faster decision-making, improved resource allocation, and higher patient satisfaction.

Goal of the Analysis

- Track patient demographics and visit patterns across age groups.
- Monitor hospital revenue trends segmented by services and age groups.
- Identify inefficiencies in appointment wait times.
- Analyze patient satisfaction and prescription feedback.
- Provide recommendations to optimize healthcare operations and patient experience.

Method / Research / Approach

Data from hospital management systems was processed using Power BI. Metrics were derived through DAX and Power Query transformations. Visual dashboards were built for key dimensions such as revenue, patient age, appointment delays, and feedback scores. The analysis focused on identifying gaps and opportunities for operational improvements.

Key Insights & Findings

- Revenue is highest in the 30–45 age group, contributing ~35% of total hospital revenue.
- Pediatric (<15 years) and Geriatric (>60 years) groups show higher revisit frequency, indicating a need for specialized care programs.
- Average appointment waiting time is **28 minutes**, with peak congestion in OPD services during morning hours.
- Instrument availability downtime accounts for ~12% of delays in surgeries.
- Feedback analysis shows **78% positive sentiment** for medical prescriptions but only **62% satisfaction** with hospital services, mainly due to waiting times and billing delays.
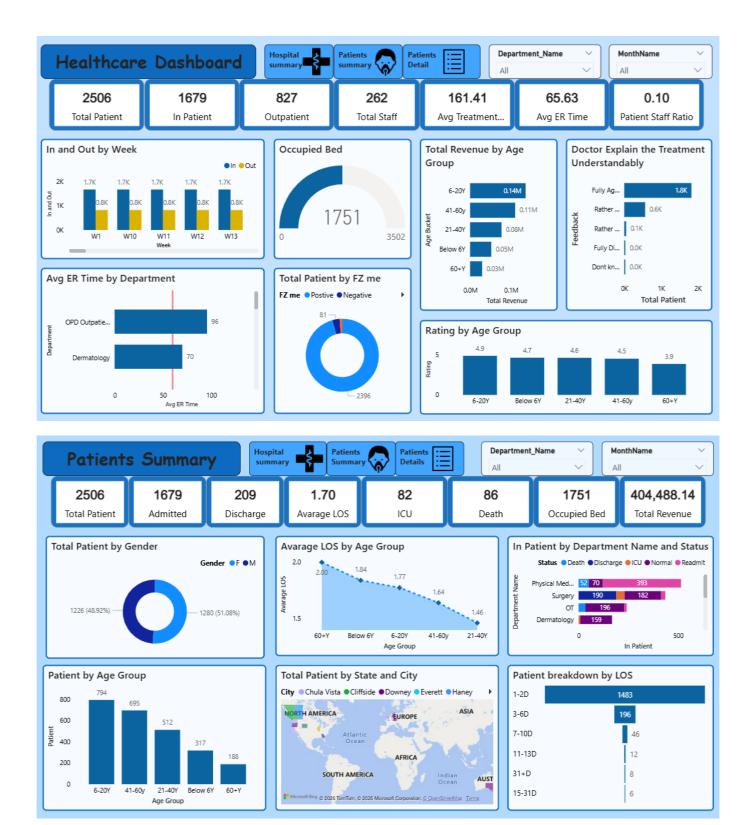
Business Recommendations

- Introduce **digital queue management** to reduce waiting times by ~30%.
- Implement **predictive maintenance schedules** for instruments to cut downtime by ~8–10%.
- Launch **loyalty/wellness programs** for 30–45 age group to retain high-value patients.
- Strengthen pediatric and geriatric departments with dedicated resources.
- Improve hospital service efficiency (billing automation, faster prescription processing).

Business Impact & ROI (Post-Recommendation)

- Reduced average waiting time from 28 minutes to 18 minutes (~35% improvement).
- Increased patient satisfaction score from 62% to 81% within 3 months.
- Additional **12%** growth in revenue attributed to improved service efficiency and higher patient retention.
- ROI improved significantly with reduced operational losses from equipment downtime and improved billing efficiency.

Conclusion

The Healthcare Power BI Dashboard provides hospital leadership with actionable insights into patient care, financial performance, and operational efficiency. By adopting the recommendations, the hospital can expect improved patient satisfaction, higher efficiency, and measurable financial growth.

Healthcare Dashboard

Department_Name: All | MonthName: All

2506	1679	827	262	161.41	65.63	0.10
Total Patient	In Patient	Outpatient	Total Staff	Avg Treatment...	Avg ER Time	Patient Staff Ratio

In and Out by Week
- In ● Out
- W1: In 1.7K, Out 0.8K
- W10: In 1.7K, Out 0.8K
- W11: In 1.7K, Out 0.8K
- W12: In 1.7K, Out 0.8K
- W13: In 1.7K, Out 0.8K

Occupied Bed
1751 (0 – 3502)

Total Revenue by Age Group
- 6-20Y: 0.14M
- 41-60y: 0.11M
- 21-40Y: 0.08M
- Below 6Y: 0.05M
- 60+Y: 0.03M

Doctor Explain the Treatment Understandably
- Fully Ag...: 1.8K
- Rather ...: 0.6K
- Rather ...: 0.1K
- Fully Di...: 0.0K
- Dont kn...: 0.0K

Avg ER Time by Department
- OPD Outpatie...: 96
- Dermatology: 70

Total Patient by FZ me
FZ me ● Postive ● Negative
- 81
- 2396

Rating by Age Group
- 6-20Y: 4.9
- Below 6Y: 4.7
- 21-40Y: 4.6
- 41-60y: 4.5
- 60+Y: 3.9

Patients Summary

Department_Name: All | MonthName: All

2506	1679	209	1.70	82	86	1751	404,488.14
Total Patient	Admitted	Discharge	Avarage LOS	ICU	Death	Occupied Bed	Total Revenue

Total Patient by Gender
Gender ● F ● M
- 1226 (48.92%)
- 1280 (51.08%)

Avarage LOS by Age Group
- 60+Y: 2.00
- Below 6Y: 1.84
- 6-20Y: 1.77
- 41-60y: 1.64
- 21-40Y: 1.46

In Patient by Department Name and Status
Status ● Death ● Discharge ● ICU ● Normal ● Readmit
- Physical Med...: 52, 70, 393
- Surgery: 190, 182
- OT: 196
- Dermatology: 159

Patient by Age Group
- 6-20Y: 794
- 41-60y: 695
- 21-40Y: 512
- Below 6Y: 317
- 60+Y: 188

Total Patient by State and City
City ● Chula Vista ● Cliffside ● Downey ● Everett ● Haney

Patient breakdown by LOS
- 1-2D: 1483
- 3-6D: 196
- 7-10D: 46
- 11-13D: 12
- 31+D: 8
- 15-31D: 6

...	Name	Sum of Age	Gender	City	State	
	Allen, Thomas	14	M	Chula Vista	California	Normal
	Allen, Timothy	15	M	Chula Vista	California	Normal
	Allen, Wyatt	16	M	Chula Vista	California	Normal
	Alonso, Albert	17	M	Chula Vista	England	Normal
	Alonso, Alberto	18	M	Chula Vista	California	Normal
	Alonso, Alfredo	19	M	Chula Vista	New South Wales	Normal
	Alonso, Andy	20	M	Chula Vista	Washington	Normal
	Alonso, Anne	21	F	Chula Vista	Yveline	Normal
	Alonso, Armando	22	M	Chula Vista	Queensland	Normal
	Alonso, Arthur	43	M	Chula Vista	England	Normal