⊕ 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.
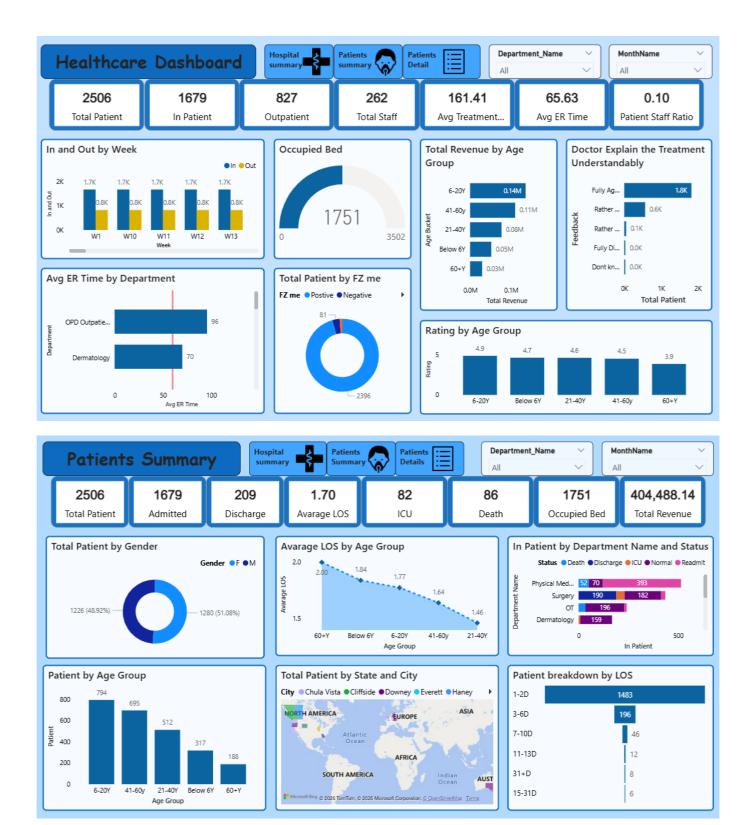
Business Recommendations

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

In and Out by Week
● In ● Out

Week	In	Out
W1	1.7K	0.8K
W10	1.7K	0.8K
W11	1.7K	0.8K
W12	1.7K	0.8K
W13	1.7K	0.8K

Occupied Bed
1751 (0 – 3502)

Total Revenue by Age Group

Age Bucket	Total Revenue
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

Feedback	Total Patient
Fully Ag...	1.8K
Rather ...	0.6K
Rather ...	0.1K
Fully Di...	0.0K
Dont kn...	0.0K

Avg ER Time by Department

Department	Avg ER Time
OPD Outpatie...	96
Dermatology	70

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

Rating by Age Group

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

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

Avarage LOS by Age Group

Age Group	Avarage LOS
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

Department Name		
Physical Med...	52 70	393
Surgery	190	182
OT	196	
Dermatology	159	

Patient by Age Group

Age Group	Patient
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

LOS	Patient
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

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Allen, Thomas	14	M	Chula Vista	California	Normal
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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
Alonso, Audrey	43	F	Chula Vista	California	Normal.
Alonso, Beth	42	F	Chula Vista	Yveline	Normal
Alonso, Billy	43	M	Chula Vista	Victoria	Normal
Alonso, Brandi	43	F	Chula Vista	New South Wales	Normal
Brown, Emily	21	F	Cliffside	British Columbia	Normal
Brown, Emma	20	F	Cliffside	British Columbia	Normal
Brown, Ethan	18	M	Cliffside	British Columbia	Normal
Brown, Fernando	18	M	Cliffside	British Columbia	Normal
Brown, Grace	16	F	Cliffside	British Columbia	Normal
Brown, Hannah	21	F	Cliffside	British Columbia	Normal
Brown, Hunter	21	M	Cliffside	British Columbia	Normal
Brown, Ian	20	M	Cliffside	British Columbia	Normal
Brown, Isabella	18	F	Cliffside	British Columbia	Normal
Brown, Jacob	18	M	Cliffside	British Columbia	Normal
Brown, James	16	M	Cliffside	British Columbia	Normal