HEALTH CARE PATIENT ANALYTICS DASHBOARD
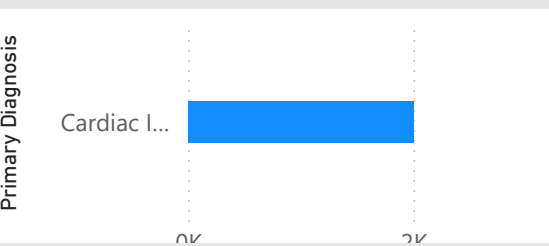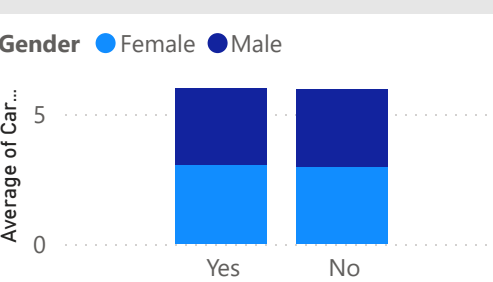
Top Diagnoses by Patient Volume
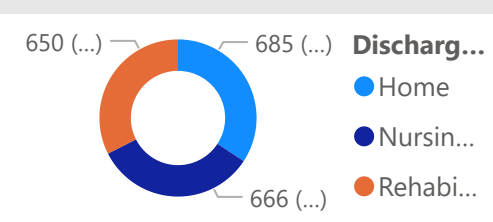

Primary Diagnosis — Cardiac I...

Average Length of Stay by Diagnosis
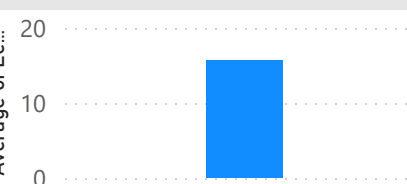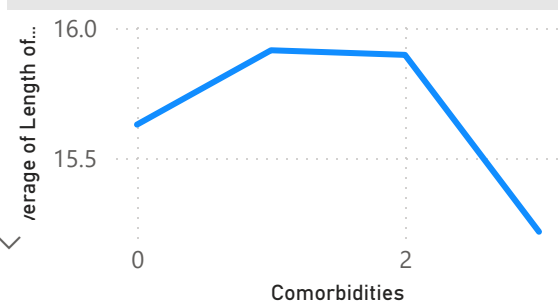

Discharge Destination, Primary Di...
- ☐ Home
- ☐ Nursing Facility
- ☐ Rehabilitation Center

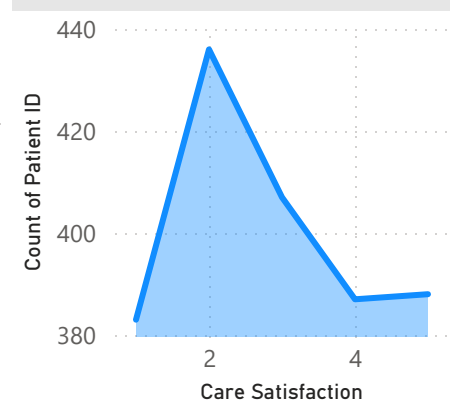## Comorbidities vs. Average LOS

Comorbidities

Satisfaction Score Distribution

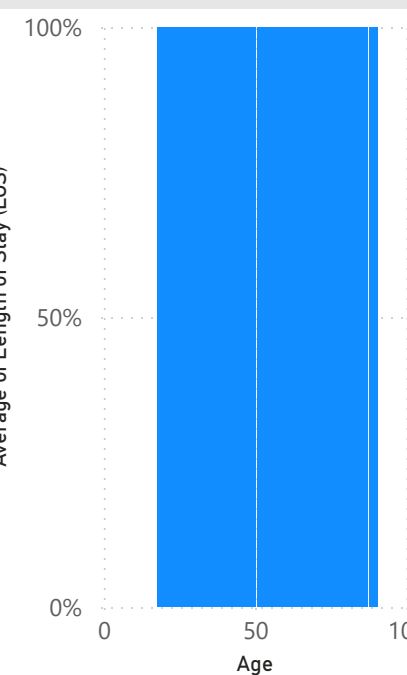Care Satisfaction
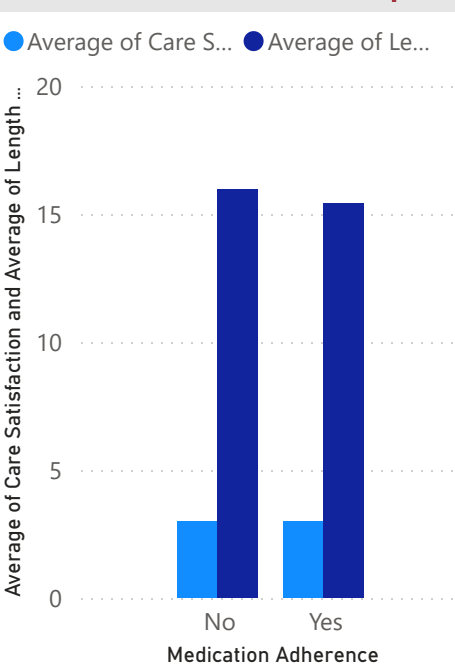
Primary Diagnosis, Gen...
- ☑ Cardiac Issues
- ☐ Diabetes
- ☐ Infections
- ☐ Injuries
- ☐ Respiratory Proble...

Gender
- ☐ Female
- ☐ Male

Average of Length of Stay (LOS) by Discharge Destination

15.67
Average LOS Over Time

Satisfaction Score by Follow-up Status

Gender ● Female ● Male

LOS by Age Group

Medication Adherence Impact

● Average of Care S... ● Average of Le...

Average LOS by Diagnosis, Average LOS Over Time, Satisfaction Score per Disch...

● Average LOS b... ● Average LO...
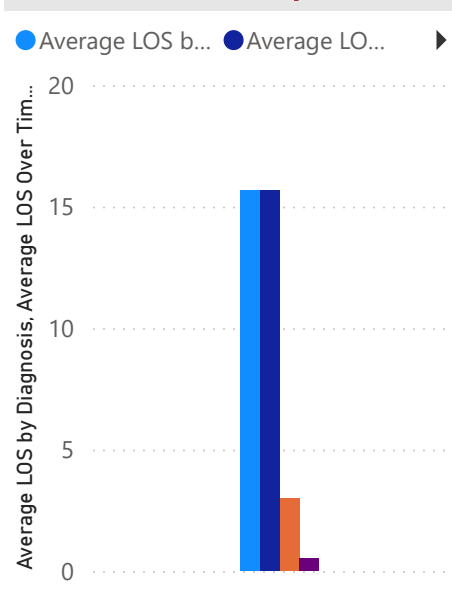
High-Risk Patient Flag Table

Patient ID	Sum of Length of Stay (LOS)	Su
PID000002	17	
PID000014	8	
PID000036	23	
PID000038	9	
PID000041	16	
PID000042	24	
PID000043	27	
PID000051	12	
PID000055	5	
PID000057	3	
PID000058	22	
PID000059	11	
PID000060	6	
PID000061	7	
Total	**31359**	

Discharge Destination Breakdown

650 (...)   685 (...)   666 (...)

Discharg...
- ● Home
- ● Nursin...
- ● Rehabi...

Health Care Patient Analytics Dashboard – Summary Report

This report presents a Power BI dashboard developed from a health care dataset to analyze patient outcomes, resource utilization, and quality metrics.
The dashboard integrates key patient metrics including diagnosis types, length of stay (LOS), discharge destinations, satisfaction scores, and medication adherence.

Data Cleaning and Modeling:

The data was cleaned to remove inconsistencies in diagnosis naming, gender labels, and follow-up status. A well-structured star schema was
built in Power BI, enabling efficient querying and visualization across dimensions like age, diagnosis, and care pathways.

Dashboard Highlights:

- **Cardiac Issues** emerged as the leading diagnosis by patient volume.
- The **average LOS is 15.67 days**, with extended stays observed in patients discharged to **rehabilitation centers**.
- **Older patients** and those with **multiple comorbidities** exhibited significantly higher LOS.
- **Medication adherence** and **follow-up care** were strongly correlated with higher patient satisfaction and reduced LOS.
- The **High-Risk Patient Table** identifies individuals with prolonged hospital stays, useful for prioritizing case reviews and targeted interventions.
- A combination of bar charts, pie charts, KPIs, and filters enhance interactivity and enable granular analysis.

Challenges & Solutions:

- Addressed fragmented diagnosis naming through data standardization in Power Query.
- Resolved performance issues by optimizing relationships and minimizing unnecessary cross-filtering.
- Ensured visual clarity by grouping related metrics and color-coding critical indicators.

Recommendation to Management:

1. **Enhance follow-up protocols and medication adherence initiatives**, which clearly contribute to improved outcomes and satisfaction.
2. **Focus case management efforts on patients flagged as high risk** due to prolonged LOS.
3. **Invest in care transition programs**, especially for patients discharged to rehabilitation centers, to reduce LOS and cost burden.
4. Use this dashboard as a live monitoring tool to guide operational and clinical decision-making.