



WiGroup Medical Center

A DATA-DRIVEN APPROACH
TO PATIENT CARE &
HOSPITAL REVENUE

1. Introduction



Context & Importance

- Data-driven decision-making improves patient care & hospital efficiency.
- Analytics reveal patterns in demographics, treatments, & finances.

Purpose of Analysis

- Extract key insights from patient records.
- Identify trends in conditions, treatments & financial data.
- Support better hospital decision-making.

Dataset Overview

- 1,000 patient records covering:
- Demographics (Age, Gender)
- Medical Conditions & Medications
- Financial Data (Insurance vs. Out-of-Pocket)
- Hospital Services & Visit Trends

2. Key Insights

Demographics & Visit Trends

01

Top Performing Doctors

Revenue Breakdown

02

Common Health Conditions

03

Medication Usage

Demographics & Visit Trends

1

Gender Breakdown:
649 Female vs. 351
Male

2

Age Group Insights:
Middle-aged and
senior adults make
up the majority

3

Visit Trends: Most
visits happen on
weekdays (Thursday
& Monday top days)

Top Performing Doctors

Top 5 Doctors by Patient Count



Possible interpretation: High patient count may indicate trust/popularity

Revenue Breakdown



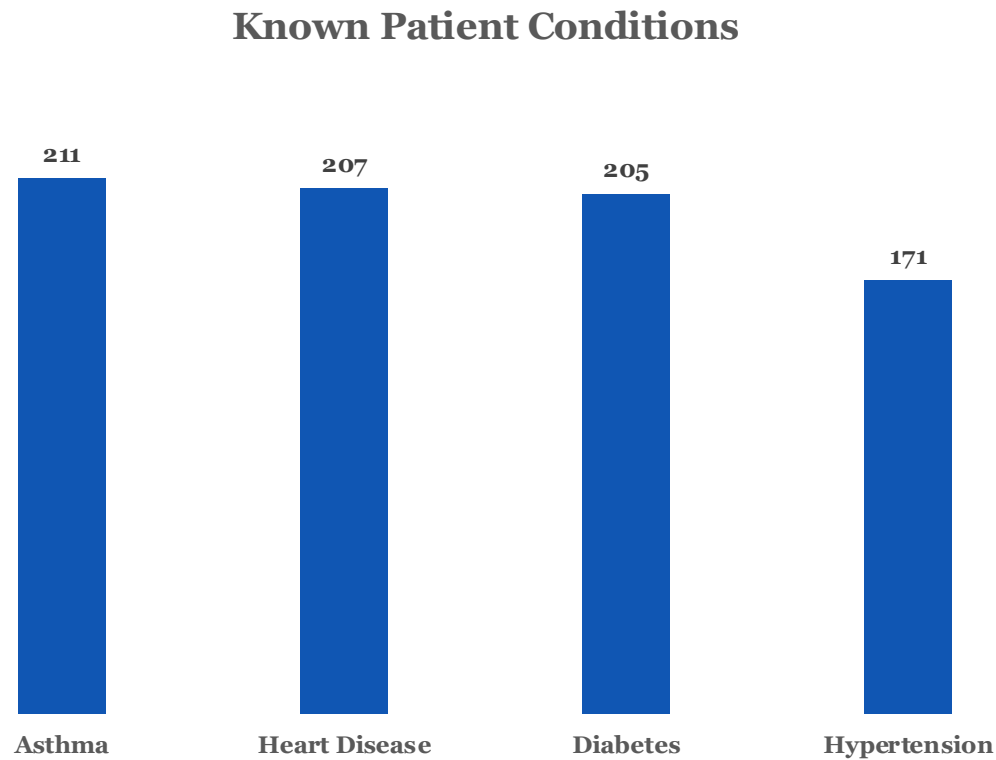
Total revenue: \$270,761

Breakdown:

- Insurance (\$120,011)
- Out-of-Pocket (\$150,750)

Insight: Patients are covering more costs than insurance

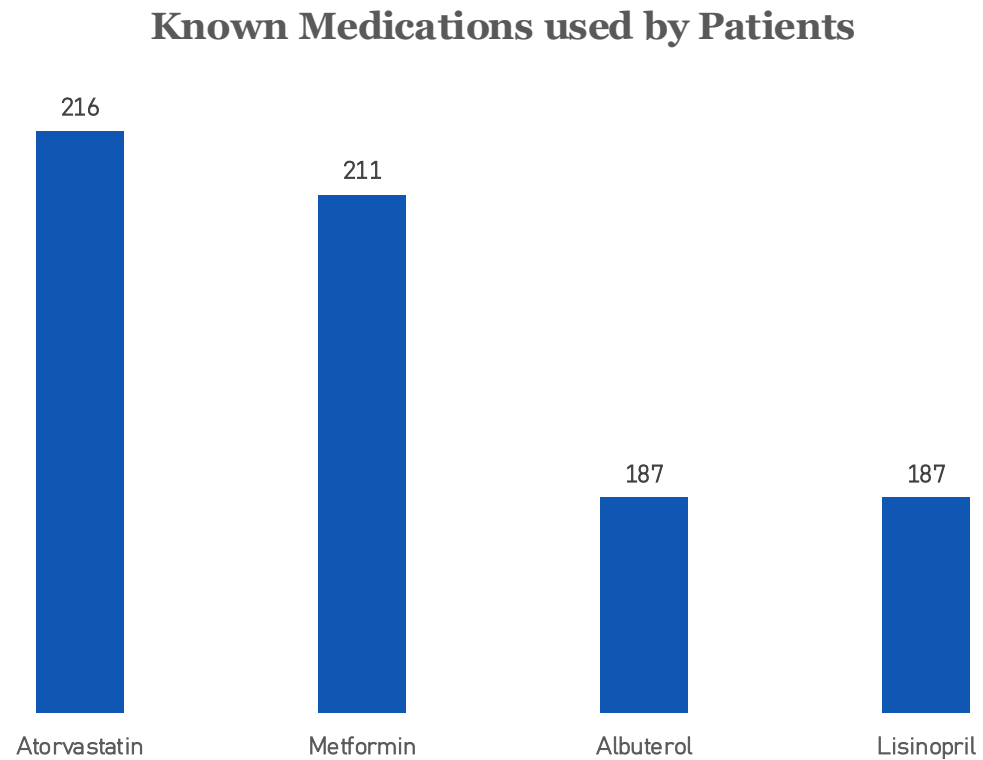
Common Health Conditions



- Top conditions:
 - Asthma (211),
 - Heart Disease (207),
 - Diabetes (205)
- Patients With Unknown Conditions (206)

Insight: Chronic diseases dominate hospital visits

Medication Usage



Insight: Medication trends suggest prevalence of cholesterol, diabetes, and respiratory issues

3. Clinical Observations



Blood Pressure & Cholesterol Trends



Top Treatments & Services

Blood Pressure & Cholesterol Trends



Blood pressure readings: **140/90 (highest count)** → Possible hypertension trend



Cholesterol distribution: 146, 160, 200 mg/dL mostly recorded → Signs of lipid issues

Top Treatments & Services



Lifestyle Modification is the most common treatment (175 patients)



Consultations & X-rays top services provided (180 & 172 patients, respectively)



Suggestion: Hospitals could focus on preventive measures and lifestyle interventions



4. Gender-Specific Health Trends

Asthma & Heart Disease
are more common among
females than males

Suggestion: Gender-based
healthcare strategies could
improve patient outcomes

5. Conclusion & Recommendations

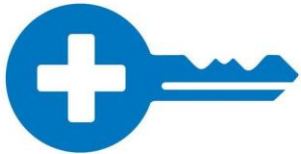


Key Takeaways



Recommendations for Future Analysis

Key Takeaways



Chronic illnesses (e.g., asthma, heart disease, diabetes) drive the majority of patient visits.

Lifestyle-based treatments (e.g., dietary changes, physiotherapy) are widely used alongside medications.

Personalized healthcare strategies based on gender and age can enhance patient outcomes.



Recommendations for Future Analysis

Evaluate	Evaluate treatment effectiveness to optimize patient care.
Investigate	Investigate high BP & cholesterol risk factors to inform preventive strategies.
Leverage	Leverage predictive analytics to anticipate patient readmissions and improve hospital planning.

WiGroup Team Members



Iyiola Oladunjoye



Zainab Saibu



Ihechukwu Osuji



Abiodun Oladipupo



Abraham Judah



Oche Onoda

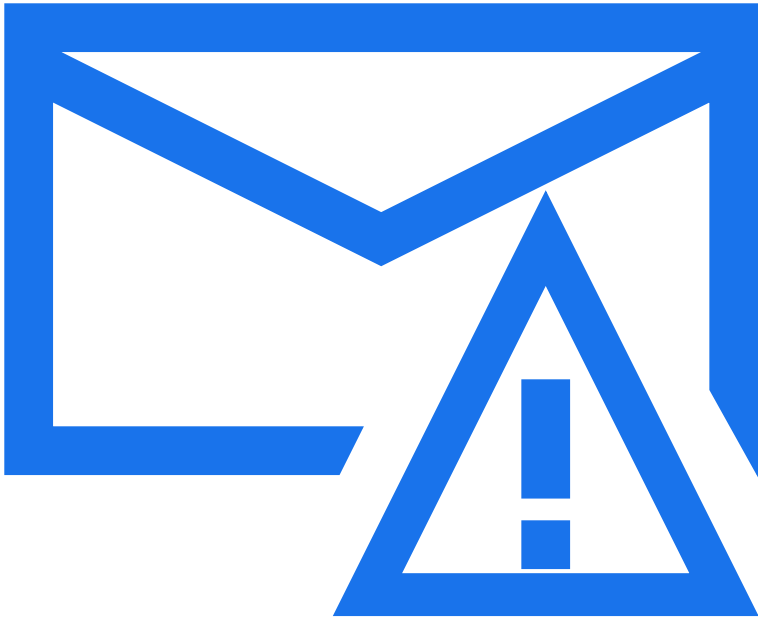


Toluwalope Adetula



Fadihla Sodiq

Thank you for listening



- Questions?
- Contact us
 - WiGroup@medicalhealthanalysis.org