



healthcare
project



What Is The Goal of This Project

- Understand the structure of the medical dataset
- Identify patterns in patients, conditions, and billing
- Find what factors may influence costs
- Support decision-making for hospitals



What Data Are We Working With

The dataset includes:

- Patient demographics (age, gender)
- Medical conditions
- Test results
- Admission types
- Billing amount
- Length of stay



Understanding Billing Behavior

- Billing amounts vary greatly.
- No single cost range dominates.
- Patients receive very different levels of medical care.



Dr. Isabel Mercado



Understanding Patients by Condition



- Conditions are evenly distributed
- No disease dominates the dataset



Balanced data ensures fair analysis



Admission Types

- Elective, Urgent, and Emergency cases have similar distribution
- Hospital deals with mixed case severity
- Helps understand workload patterns





Test Results Overview

Normal, Abnormal, Inconclusive almost equal

Indicates diverse patient conditions

Abnormal results show medical complexity



Age vs Billing

- No strong link between age and cost
- Gender also does not influence billing



Length of Stay



Stays vary widely



Longer stays often lead to higher billing amounts due to extended medical care



Emergency cases slightly longer



Complexity differs between patients



Key Takeaways

- Costs vary widely
- Age and gender don't drive billing
- Dataset balanced
- Hospital handles mixed cases
- No strong linear correlations



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Conclusion

- The EDA reveals valuable patterns
- Shows variability in patients
- Helps guide future decision-making