300
Total Visits

275K
Total Pharmacy Revenue

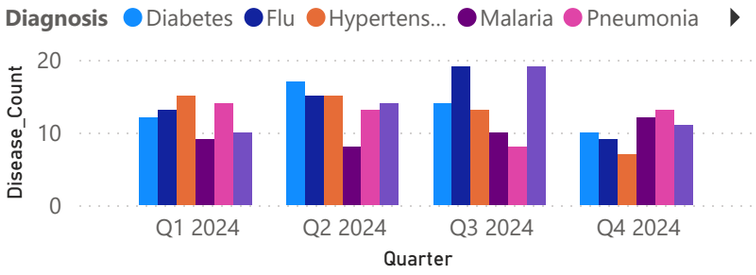
1.41
Avg Length of Stay

County
All

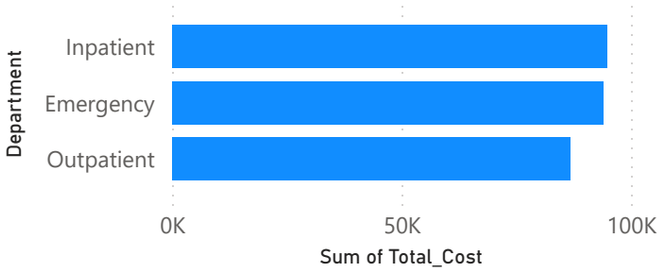
Diagnosis
All

Visit_Date
1/2/2024
12/30/2024

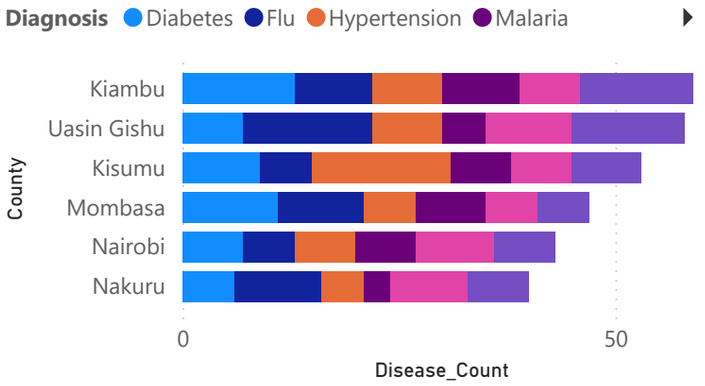
Disease trends over time



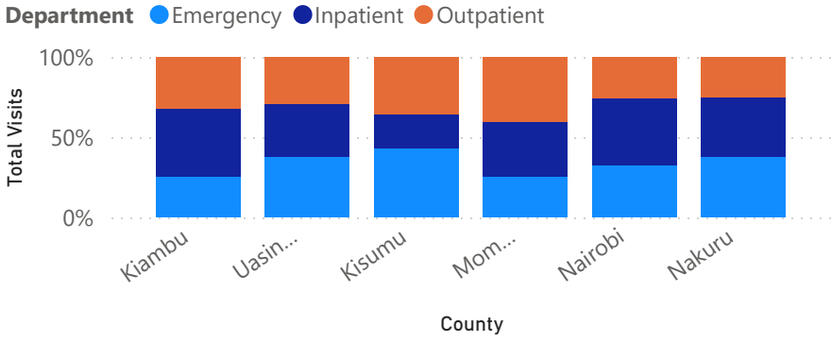
Total Cost by Dept



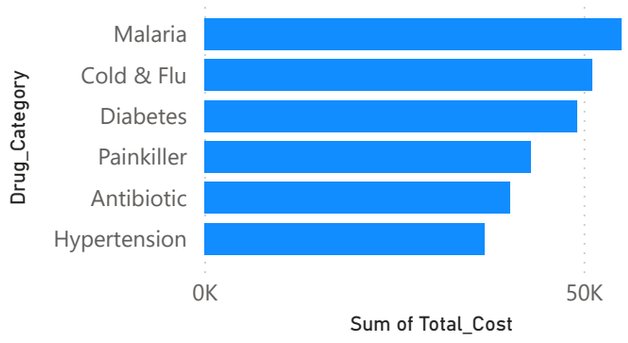
Distribution of Diseases Across Counties



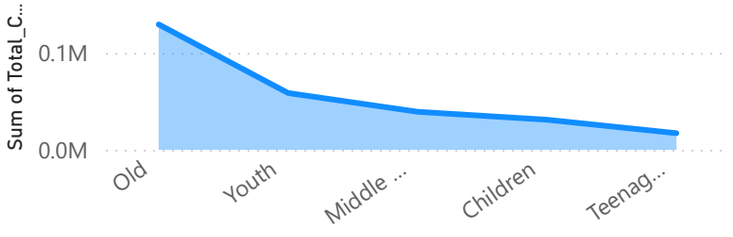
Total Visits by County and Department



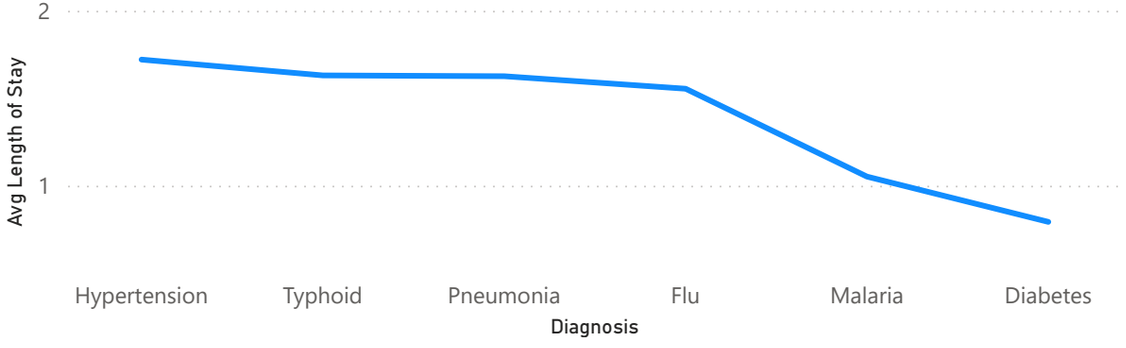
Total Pharmacy Revenue by Drug Category



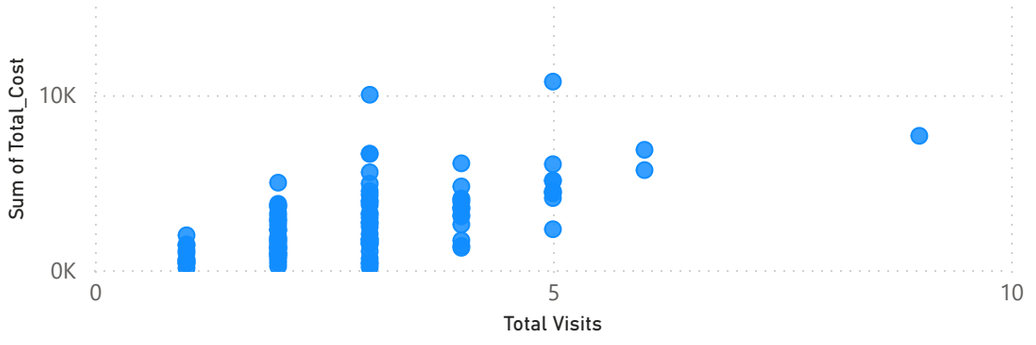
Total Cost by Age Group



Avg Length of Stay by Diagnosis



How No of Visits Affect Total Cost



Executive Summary

Disease Prevalence Across Counties

The analysis shows that **Malaria and Flu** are among the most common diseases across several counties, particularly in Kiambu and Uasin Gishu. Chronic conditions such as **Hypertension and Diabetes** also remain consistently present across all counties, indicating a dual burden of infectious and non-communicable diseases.
Disease trends over the quarters suggest relatively stable patterns without extreme seasonal spikes. This indicates steady demand for healthcare services throughout the year rather than sharp outbreak-driven fluctuations. The consistent presence of chronic illnesses suggests long-term medication demand and ongoing treatment requirements across the hospital network.

Relationship Between Visits and Pharmacy Revenue

There is a clear positive relationship between the number of patient visits and total pharmacy revenue. Patients with more visits generally contribute to higher pharmaceutical spending. The scatter analysis confirms that as visit frequency increases, total medication cost tends to rise.
However, the increase is not perfectly proportional. Some patients with multiple visits generate moderate pharmacy costs, suggesting differences in treatment complexity, drug types, or prescribing patterns. This indicates that pharmacy revenue is influenced not only by patient volume but also by diagnosis severity and medication intensity. Therefore, while higher visits typically lead to higher revenue, volume alone does not fully explain cost variation.

Departmental Cost Drivers

The Inpatient department generates the highest share of pharmacy costs, followed closely by Emergency services, while Outpatient services account for the lowest portion. This reflects the more intensive treatment regimens and longer care cycles associated with admitted patients.
Inpatient settings often involve multiple medications, ongoing monitoring, and management of complex conditions. As a result, cost-control strategies may yield the greatest impact when focused on inpatient prescribing behavior, drug procurement efficiency, and treatment standardization protocols.

Age Group Medication Consumption

Older patients contribute the largest share of pharmacy expenditure compared to youth, middle-aged, and pediatric groups. This likely reflects higher prevalence of chronic diseases and long-term medication management among elderly populations.
Younger age groups generate comparatively lower pharmaceutical costs, suggesting shorter treatment cycles and less complex medication requirements. This demographic pattern highlights the financial impact of aging populations on hospital pharmacy budgets.

Length of Stay and Pharmacy Spending

Analysis shows that longer hospital stays do not always correspond to the highest pharmacy spending. Some diagnoses are associated with extended monitoring but moderate medication use, while others involve higher drug intensity over shorter admission periods.
This suggests that treatment type and clinical protocols significantly influence cost patterns. Pharmacy expenditure is therefore shaped by both duration of stay and therapeutic complexity rather than time alone.