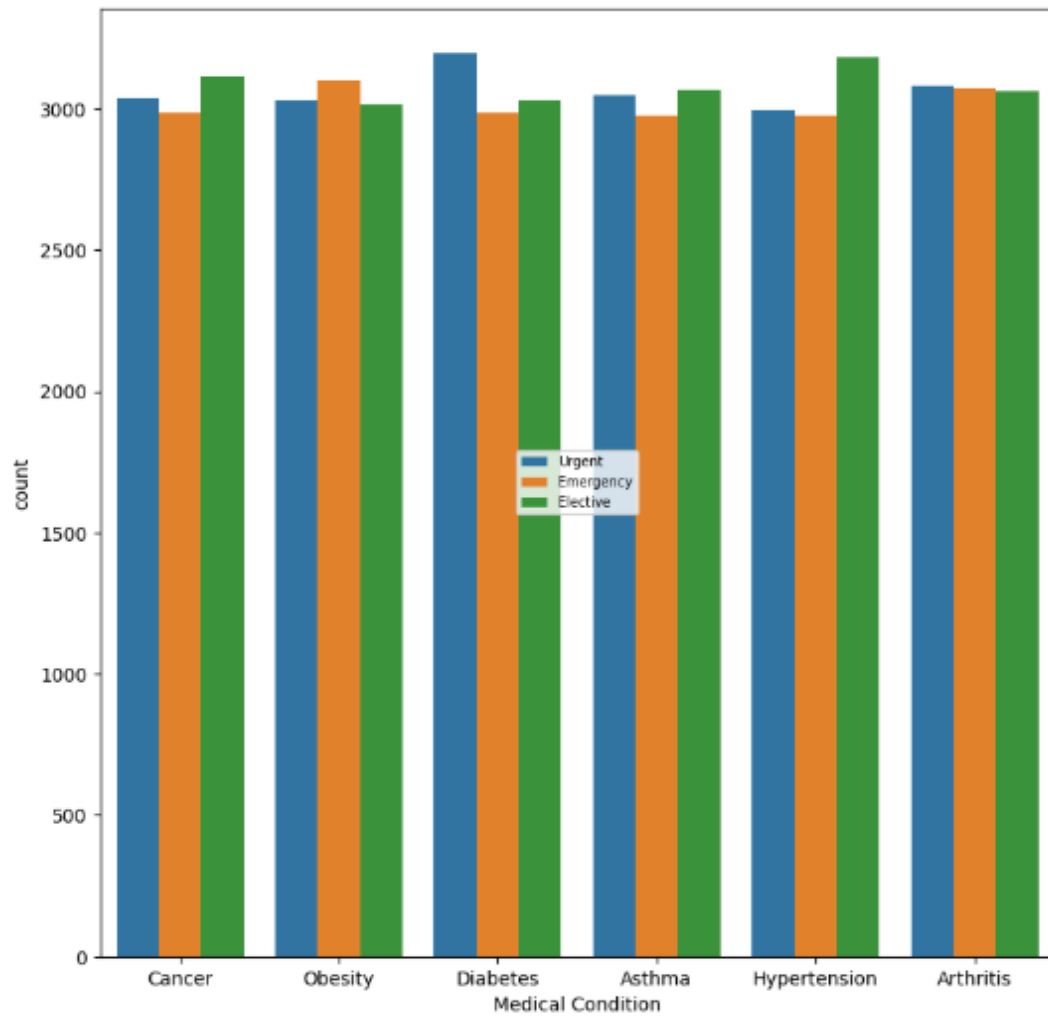
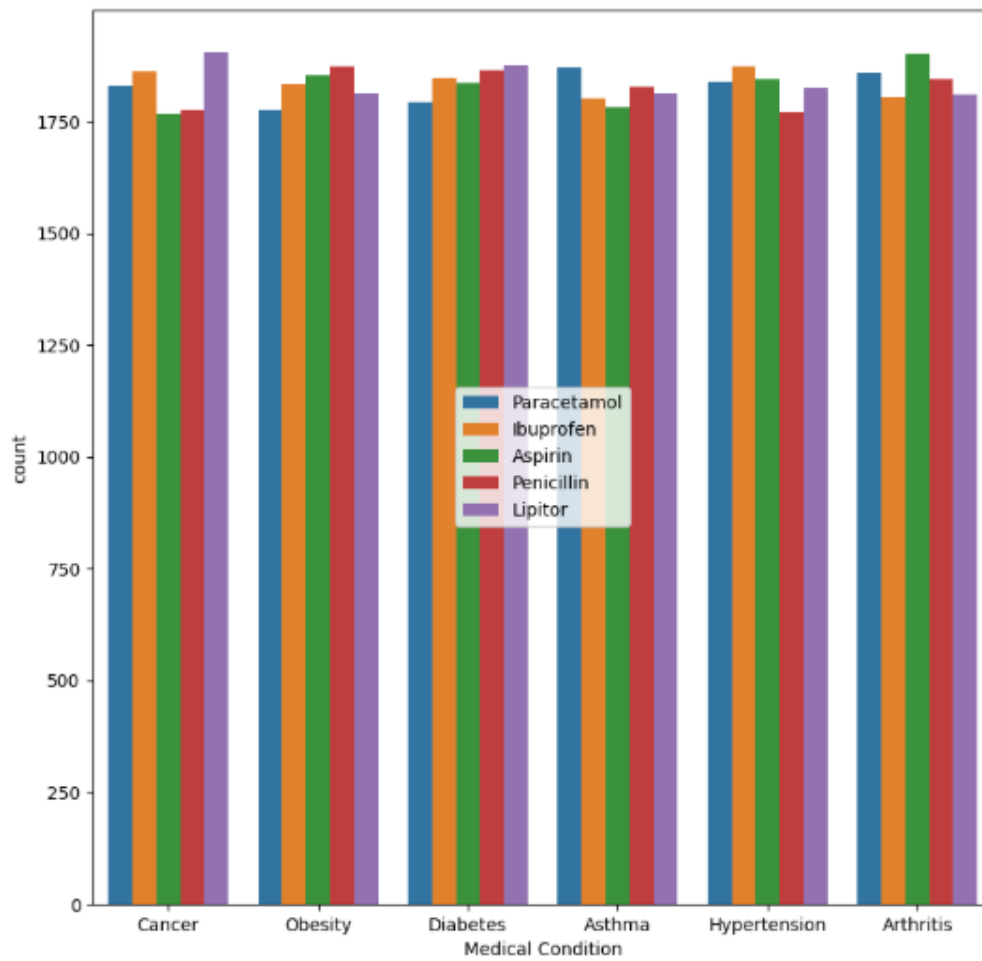


There's no strong visible correlation between blood type and medical condition, which suggests that **blood type may not be a highly predictive feature.**



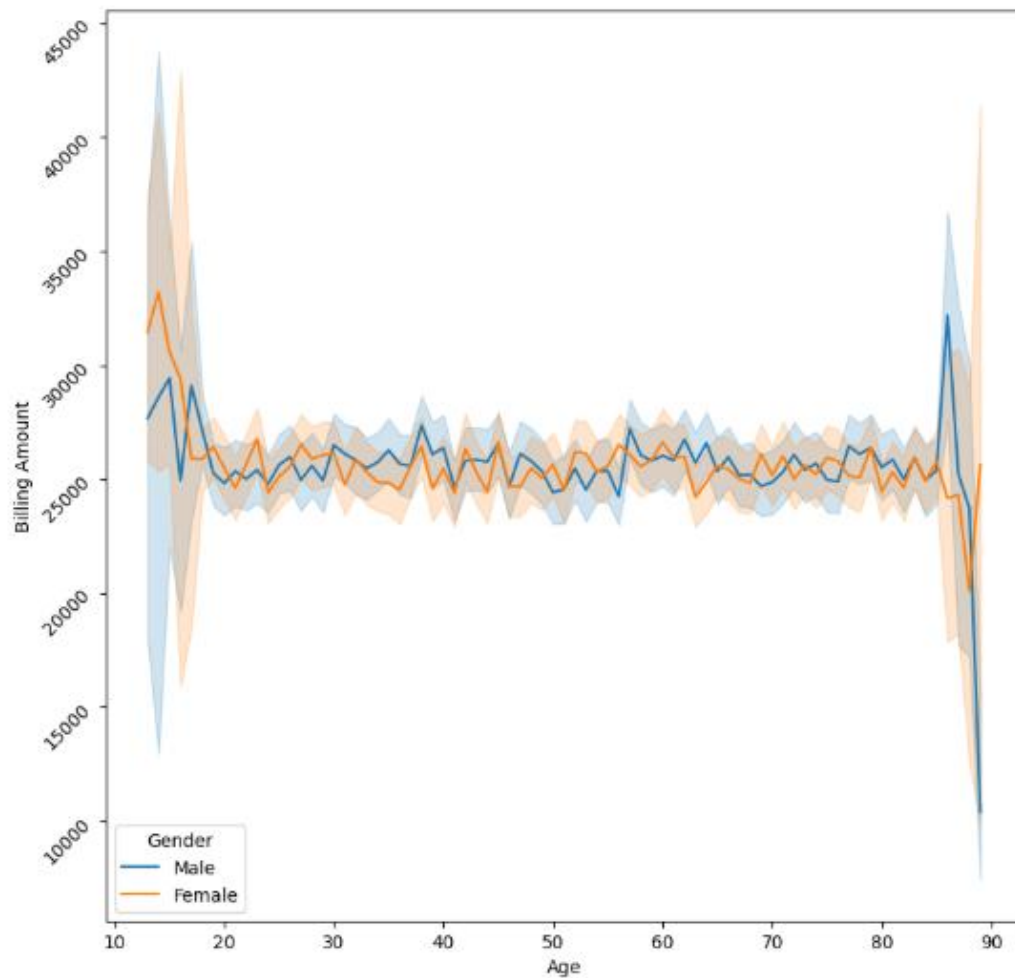
Most medical conditions lead to **Urgent** or **Emergency** admissions, which aligns with the nature of chronic or severe illnesses.

Conditions like *Obesity* and *Diabetes* have a relatively higher number of **Elective** admissions, indicating that these might be managed more proactively.



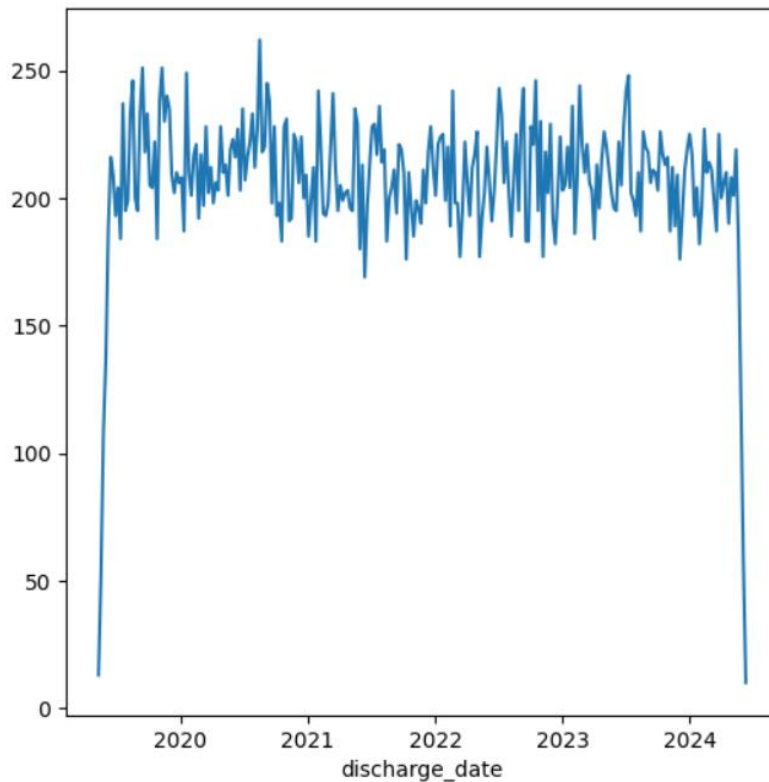
Medications like **Paracetamol** and **Lipitor** are widely used across multiple conditions, likely due to their general-purpose or symptom-relief nature.

This opens the door to using medication data as an indicator of **disease complexity or comorbidities**.



Billing amount tends to increase with age, which is expected as older patients often require more intensive care.

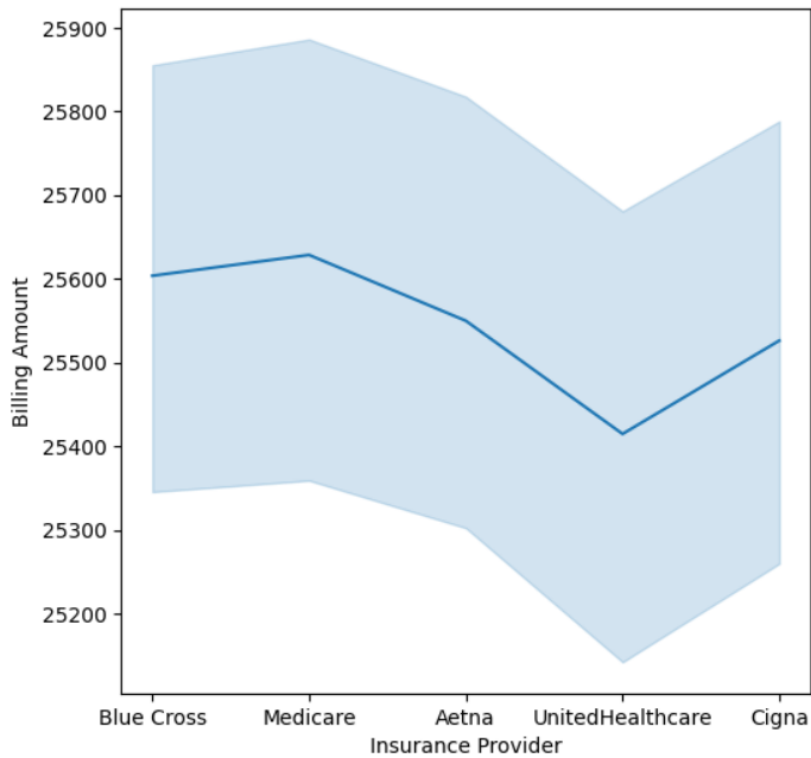
There's a slight difference between males and females, where males generally have slightly higher billing — this could be due to biological or systemic factors.



The weekly discharge trend from 2019 to early 2024 shows a **consistent pattern** in patient discharges, typically ranging between **180–250 discharges per week**.

The sharp drops at the beginning and end of the timeline are likely due to **incomplete or ongoing data** rather than actual decreases in hospital activity.

Minor fluctuations throughout the timeline may reflect **seasonal patterns** or **operational factors**, such as holidays or staffing changes.

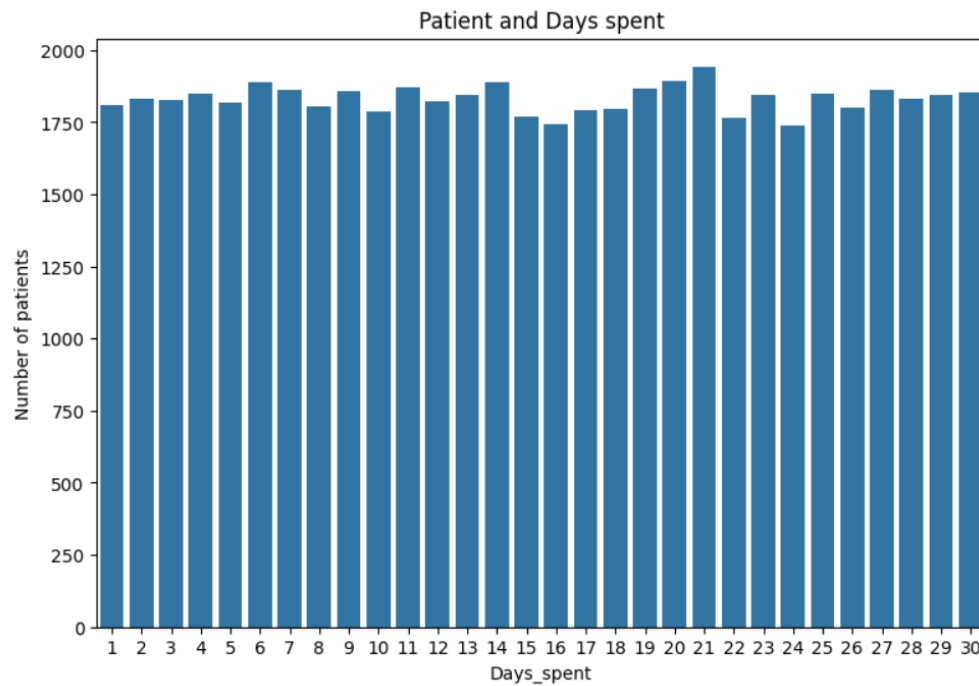


**Billing Amount varies slightly** across insurance providers but stays within a close range.

**UnitedHealthcare** has the **lowest average billing** and the **highest variability** (wide confidence interval).

**Blue Cross and Medicare** show **more consistent billing** (narrower confidence intervals).

**Cigna** returns closer to the average after a drop with UnitedHealthcare.

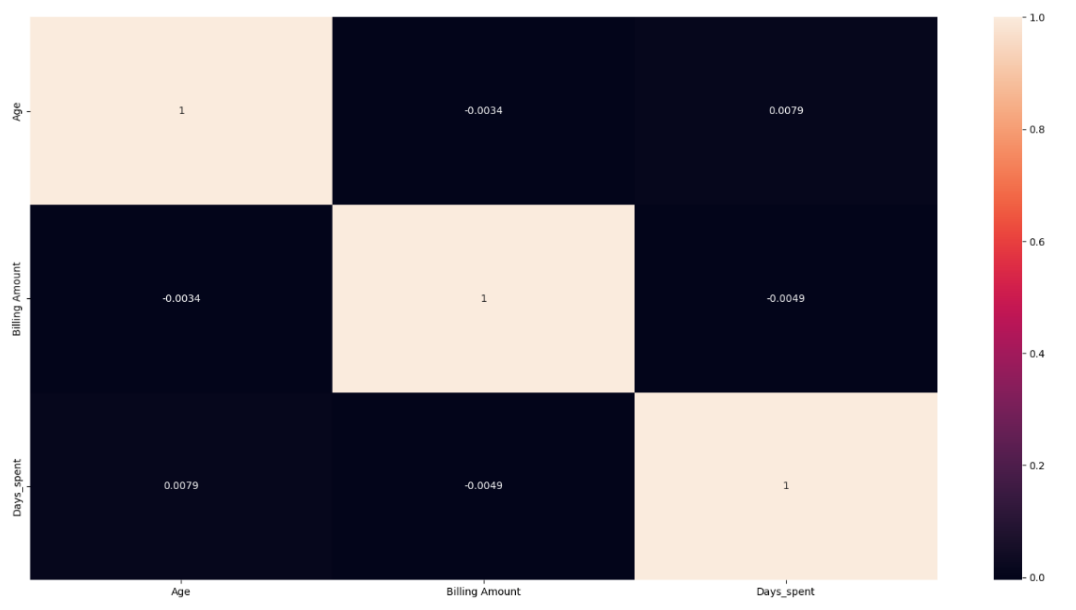


**Patient count is stable** across all 30 days stays roughly between 1750 and 1950 patients.

**Day 24** has the **highest number of patients**, close to 1950.

**Days 17, 18, and 23** show slightly lower patient numbers compared to others.

There's **no major drop or spike**, indicating a consistent patient flow over the month.



### Age vs Billing Amount

Correlation: -0.0034

Insight: No significant relationship.

### Age vs Days Spent

Correlation: 0.0079

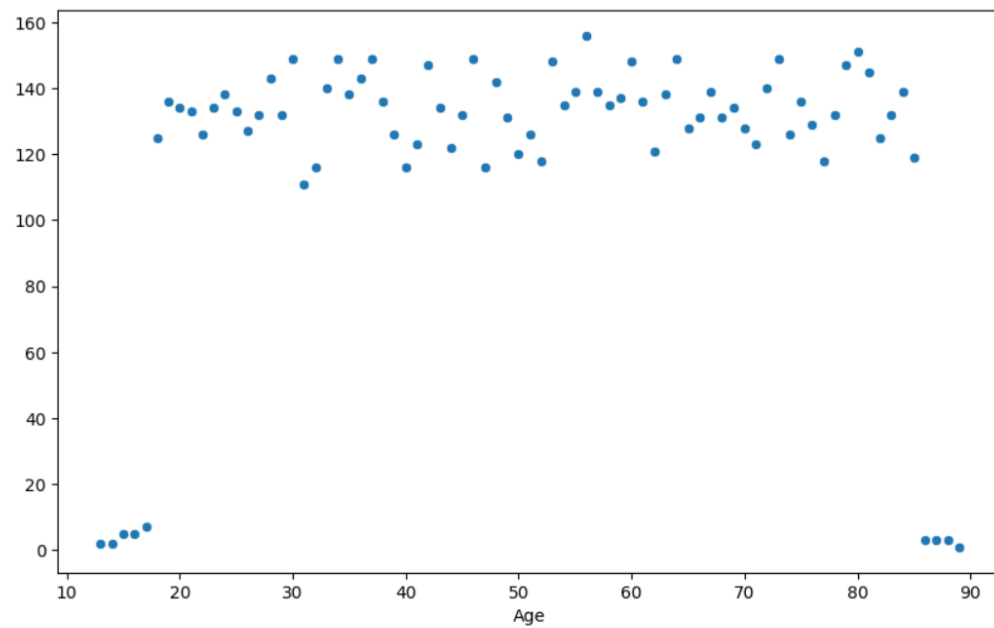
Insight: No significant relationship.

### Billing Amount vs Days Spent

Correlation: -0.0049

Insight: No significant relationship.



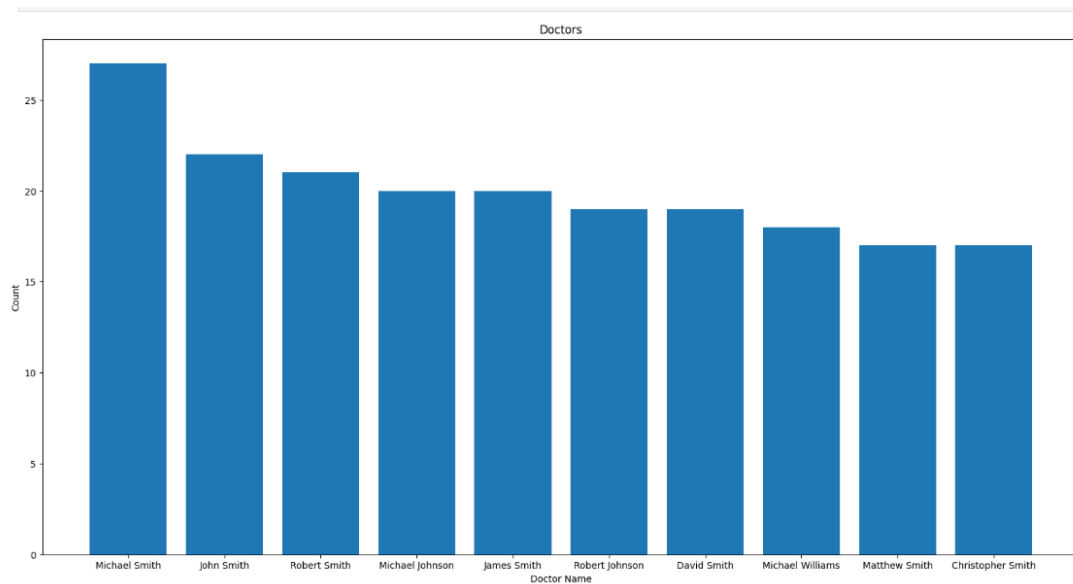


Age

The scatter plot shows **most cancer patients are between ages ~30 to 85.**

There's a **significant drop in patient count below age 30 and above 85.**

The distribution is fairly **consistent across middle ages** (counts mostly between 120–150)

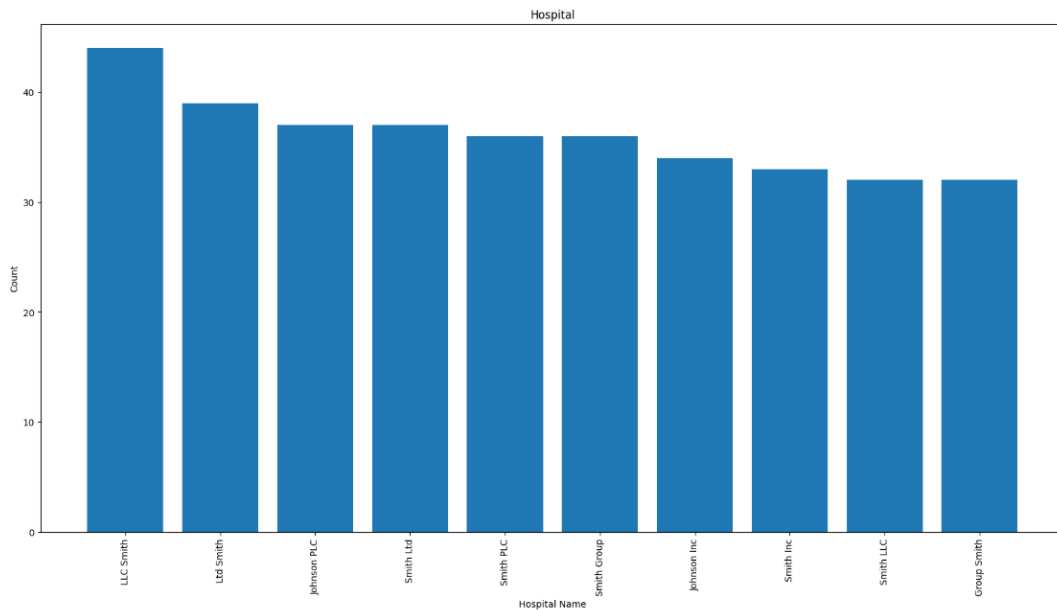


**Michael Smith appears the most** around 27 times, indicating he's likely the most active or in-demand doctor.

**"Smith" is very common** 6 out of the top 10 doctors have that last name, showing a possible name bias or common surname.

**First names like "Michael" and "Robert" repeat** could affect any name-based analysis.

**Small difference in counts (except the top one)** the rest of the top 10 are close in frequency, showing a relatively balanced distribution.

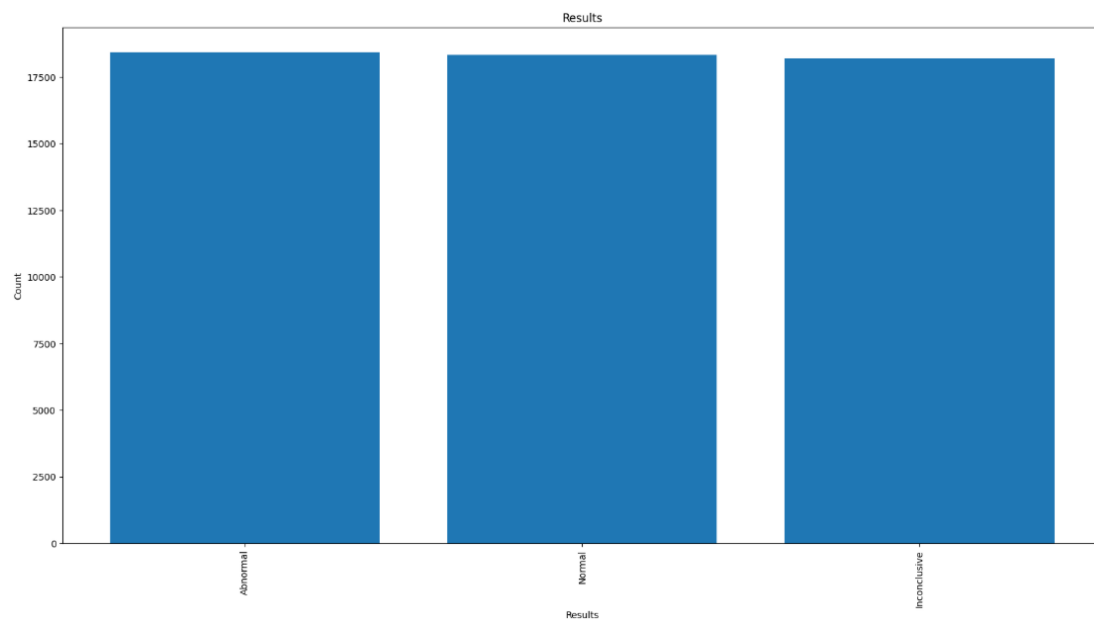


**"LLC Smith" has the highest count** over 40 entries, showing it's the most frequent hospital in the dataset.

**The name "Smith" dominates** appears in 7 out of 10 hospital names, which may suggest a bias or data imbalance toward a specific hospital group or brand.

**Johnson hospitals appear too** "Johnson PLC" and "Johnson Inc" are also common, indicating they might be key players as well.

**Counts are relatively close** apart from the top one, others are between ~30 to ~39, showing a somewhat even distribution.



**Balanced distribution** All three categories ("Abnormal", "Normal", "Inconclusive") have nearly equal counts (~18,000 each).

**No major outlier** Suggests that test results are well-distributed, and there is no skew toward a specific outcome.

**Inconclusive results are common** Having "Inconclusive" almost as frequent as the other two may point to potential issues in testing quality, timing, or data capture.