**INSIGHT**

**Hospital Management System (HMS)** designed to manage and track the data of **patients**, **doctor**s, **nurses which include database design**, d**ata insertion, data manipulation**, **data analysis queries, Schema evolution** (altering tables, adding columns) **Joins and subqueries** for report generation core operations such as inserting records, updating patient room information, tracking payment status, and calculating nurse salaries. These elements not only reflect real-life hospital operations but also indicate a good grasp of data manipulation and reporting—skills essential for managing structured data systems in any domain.

By analyzing the status column (which holds values like paid, unpaid, and party paid), we can observe 40% of patients are fully paid, 30% are unpaid, indicating possible financial hardship or billing delays and 30% are on installment (Partly Paid**)**, suggesting the need for a flexible billing plan.

Nurse salaries are **not fixed**, even for the same nurse this inconsistency may indicate varying pay per shift or patient severity, manual error in salary data entry or lack of centralized payroll policy and average salary of all nurses is 560,000 and the suggests **manual, location-specific salary increments** while effective short-term, this approach lacks traceability and can result in inconsistency.

All nurses are assigned to **multiple patients** across different rooms which suggests a pattern of **reliability and trust**, where certain nurses are preferred or relied upon for consistent care delivery are sourced from across Lagos and nearby areas, which may impact punctuality, availability, or shift preferences

All doctors are currently managing an equal number of patients (2 each). This indicates a **balanced workload** distribution, which is good for avoiding overburden but may not reflect **real-time patient complexity** or **case severity**

**Recommendation**

* There is a significant number of patients who are either unpaid or partially paid. This highlights a potential **cash flow issue** for the hospital and suggests the need to implement **Pre-admission payment plans**, d**iscounts or subsidies for recurring patients** and **follow-up billing mechanisms**
* This average salary provides a benchmark. Nurses earning below it may need review for pay equity, and those earning above it should be justified by experience, skill level, or shift type (night/emergency) while ensuring transparency and accountability.
* Optimize shift assignments by aligning **nurse addresses to room clusters** or assign nurses closer to their residence to reduce lateness and fatigue