Hospital Operations & Bed Management Analysis Report

Utilization, Capacity & Demand Analysis (Weekly MIS)

1. Introduction

This report presents an analytical review of hospital bed utilization, demand pressure, and capacity performance based on the Excel MIS dataset. The objective is to support operational decision-making and resource planning.

2. Key Performance Indicators (KPIs)

Average Bed Utilization: 92.47%
Total Admissions: 5851
Average Refusal Rate: 35.08%
Peak Demand Gap: 363 Beds

3. Department-wise Performance

Service	Avg Utilization (%)	Total Admissions	Total Demand Gap	Avg Refusal (%)
ICU	84.38	648	17	11.66
emergency	100.00	1185	5008	76.77
general_medicine	97.31	2332	1866	34.62
surgery	88.19	1686	290	17.26

4. Operational Analysis

• Emergency department shows sustained 100% utilization, indicating chronic overcrowding and lack of buffer capacity.
• General Medicine demonstrates balanced capacity with moderate demand pressure.
• ICU maintains comparatively stable utilization and low refusal rates.
• Surgery shows moderate variability, suggesting operational interruptions or scheduling inefficiencies.

High demand gaps in Emergency indicate frequent unmet demand and high patient refusal risk.

5. Recommendations

1. Expand emergency bed capacity and optimize patient flow.
2. Improve discharge planning to reduce congestion.
3. Strengthen staff allocation during peak periods.
4. Monitor demand gap trends for early warning signals.
5. Implement continuous MIS review for operational improvement.

6. Conclusion

The analysis indicates persistent capacity stress in emergency services and moderate pressure in general medicine. Data-driven monitoring through this MIS dashboard enables proactive planning and performance improvement.

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Excel-Based Hospital MIS Project