

"Supply Chain Management: Comparative Analysis of Non-Medical Items and Diagnostic Tests & An Overview of Supply Chain Management at CK Birla Hospital, Jaipur"

Synopsis

This dissertation explores the effectiveness of the supply chain management (SCM) system at **CK Birla Hospital, Jaipur**, with a focus on two key areas: **non-medical items** (e.g., stationery, cleaning supplies) and **diagnostic tests** (e.g., lab consumables, outsourced tests). The aim is to identify inefficiencies and propose improvements to enhance hospital operations, cost control, and service delivery.

Objectives:

- To compare procurement and vendor performance for diagnostic tests and non-medical items.
- To analyze turnaround time (TAT), cost-effectiveness, and supply consistency.
- To evaluate the impact of digital tools like ERP, JIT inventory, and automated procurement on SCM efficiency.

Methodology:

- **Primary data:** Vendor quotations, hospital staff interviews, and satisfaction surveys.
- **Secondary data:** Industry reports and case studies.
- **Sample size:** 3 diagnostic vendors and 5 non-medical suppliers; feedback from 10 hospital departments.
- **Tools used:** Cost-benefit analysis, performance metrics, and negotiation outcomes.

Key Findings:

- **Diagnostic Vendors:**

- *Metropolis Healthcare* showed the fastest turnaround.
- *Dr. B Lal Laboratory* offered competitive pricing for routine tests.
- *Agilus Diagnostics* balanced cost and reliability.

- **Non-Medical Items:**

- Vendor C emerged as the most reliable in both cost and delivery timelines.
- Bulk purchases and negotiation strategies reduced procurement costs by 5–15%.

Conclusion:

Comparative analysis and structured vendor evaluations significantly improve procurement decisions, reduce costs, and enhance hospital supply chain efficiency. Emphasis on digital integration, AI-based demand forecasting, and real-time inventory systems is recommended for future improvement.