

Comparative Analysis of Supply Chain Logistics in Hospital Management

Focus on Non-Medical Items & Diagnostic Tests at CK Birla Hospital, Jaipur.

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Introduction: Importance of Hospital SCM

Seamless Operations

SCM ensures smooth procurement, storage, and delivery of hospital resources.

Cost Efficiency

Inefficiencies can disrupt patient care and increase operational costs.

Key Focus Areas

This study analyzes SCM of non-medical items and diagnostic tests.



Study Objectives: Enhancing Supply Chain Efficiency



Vendor Comparison

Compare vendor performance in diagnostics and non-medical supplies.



Evaluate Metrics

Assess cost, turnaround time (TAT), and procurement efficiency.



Optimize Operations

Recommend SCM optimizations using digital tools and negotiation.

Methodology: A Comparative Approach

Research Design

This study employs a comparative analysis approach.

Data Sources

- Vendor quotations and previous data
- Stakeholder feedback
- Relevant case studies

Sample Size

- 3 diagnostic laboratories
- 5 key suppliers
- 10 hospital departments surveyed

Analytical Tools

- Cost-benefit analysis
- Turnaround time (TAT) evaluation
- Vendor negotiation impact assessment

Key Findings: Diagnostic Services Performance

Metropolis

Exhibited the fastest turnaround time for test results.

Dr. B Lal

Provided the most cost-effective diagnostic services.

Agilus

Offered a balanced approach with reliable service and fair pricing.

A multi-vendor strategy enhances efficiency and reduces overall costs.

Key Findings: Non-Medical Item Procurement



Evaluated Items

Office supplies, cleaning tools, and administrative items were assessed.



Cost Savings

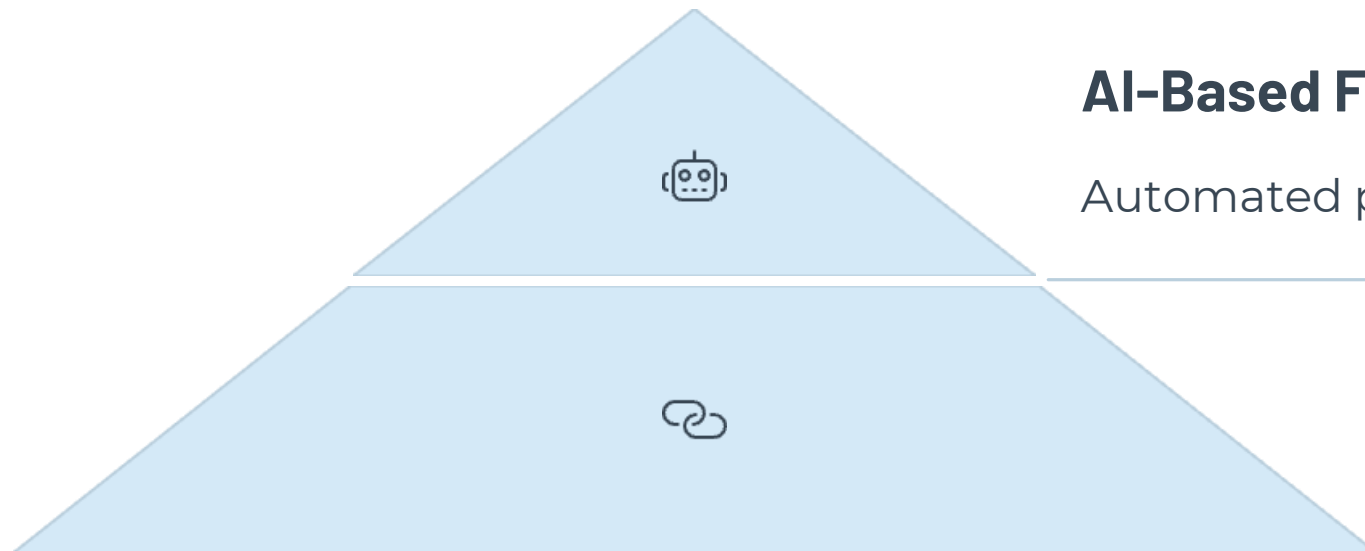
Bulk purchasing and vendor negotiation yielded 5-15% cost savings.



Vendor Selection

Vendor C was chosen for timely delivery and affordability.

Leveraging Digital Supply Chain Tools



AI-Based Forecasting

Automated procurement workflows improved efficiency.

Blockchain Integration

Enhanced transparency and supplier accountability.

These technologies streamline operations and provide valuable insights.

Recommendations for Optimization

- Adopt AI and digital procurement systems for efficiency.
- Implement multi-vendor models for greater flexibility.
- Continuously monitor vendor performance metrics.
- Prioritize demand forecasting using data-driven insights.

These strategies ensure cost control and enhance patient care quality.

CONCLUSION

- SCM enhances hospital efficiency, cost control, and patient safety.
- Vendor comparison led to smarter outsourcing and better negotiation outcomes.
- Digital tools like ERP & AI improved supply visibility and reduced delays.
- Continuous performance tracking ensures long-term supply chain resilience.

THANK YOU