

OPTIMIZING MEDICAL SUPPLIES INVENTORY MANAGEMENT IN HOSPITALS FROM A SUPPLY CHAIN PERSPECTIVE

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INTRODUCTION

- ▶ Efficient management of medical supplies is critical for the effective operation of healthcare facilities. Hospitals rely on a constant flow of pharmaceuticals, surgical instruments, and consumables to ensure high-quality patient care.
- ▶ Inefficient inventory management can lead to stockouts, delaying treatment, or overstocking, which can cause financial losses due to expired or obsolete items.
- ▶ Balancing availability with cost and minimizing waste are key challenges that require a robust and reliable supply chain.



AIM AND OBJECTIVE OF THE STUDY

❑ AIMS:-

To optimize the inventory management of medical supplies in hospitals by leveraging supply chain management principles and advanced technologies to enhance efficiency, reduce costs, and ensure the timely availability of essential medical items.

❑ OBJECTIVES:-

Evaluate Current Practices:

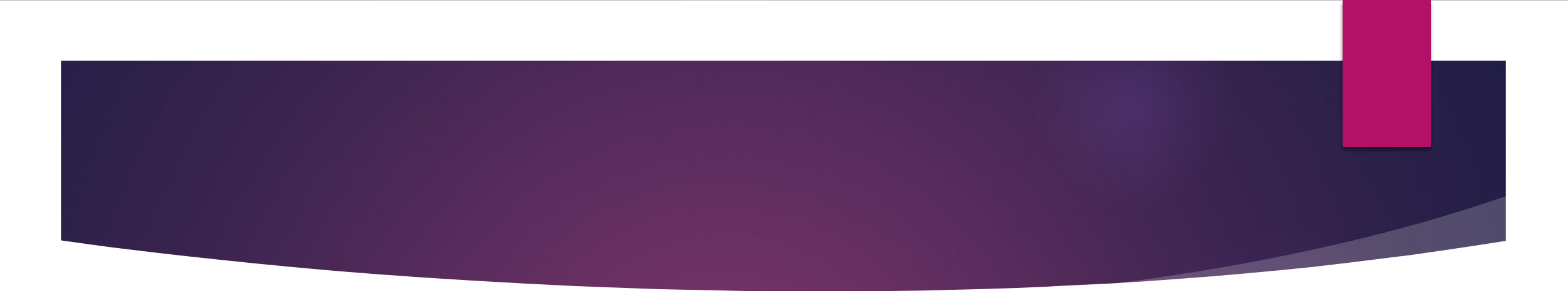
- Identify inefficiencies in existing inventory systems.

Develop a Supply Chain Framework:

- Integrate supply chain principles into inventory management processes.

Utilize Advanced Technologies:

- Implement automation, data analytics, and AI for better inventory control.



Apply Case Studies:

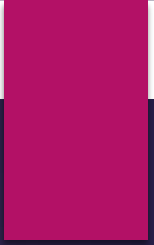
- Test the framework in real hospital settings to assess effectiveness.

Measure Outcomes:

- Analyze financial savings and operational improvements from optimized practices.

Provide Recommendations:

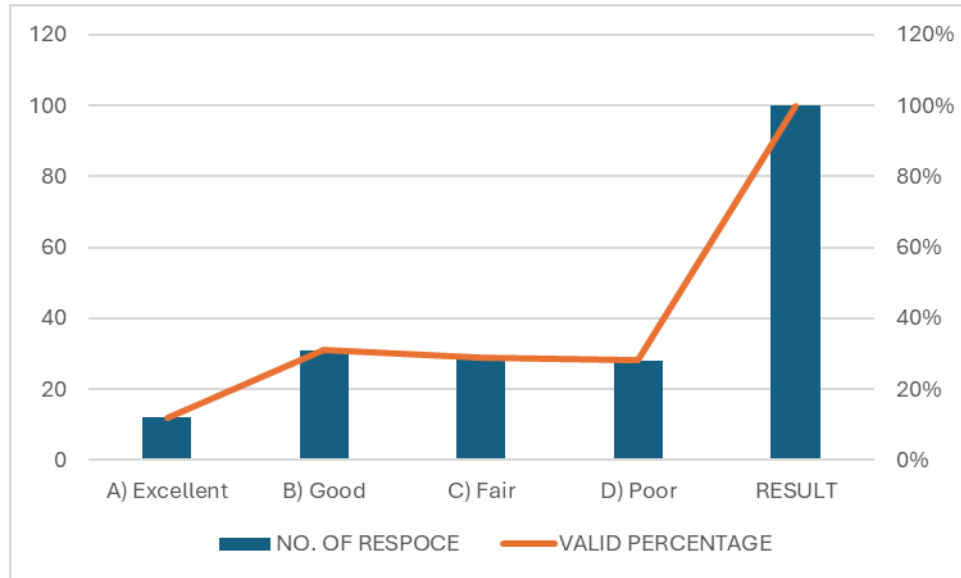
- Offer actionable guidelines for sustainable inventory management in hospitals.



INVENTORY MANAGEMENT SURVEY ANALYSIS

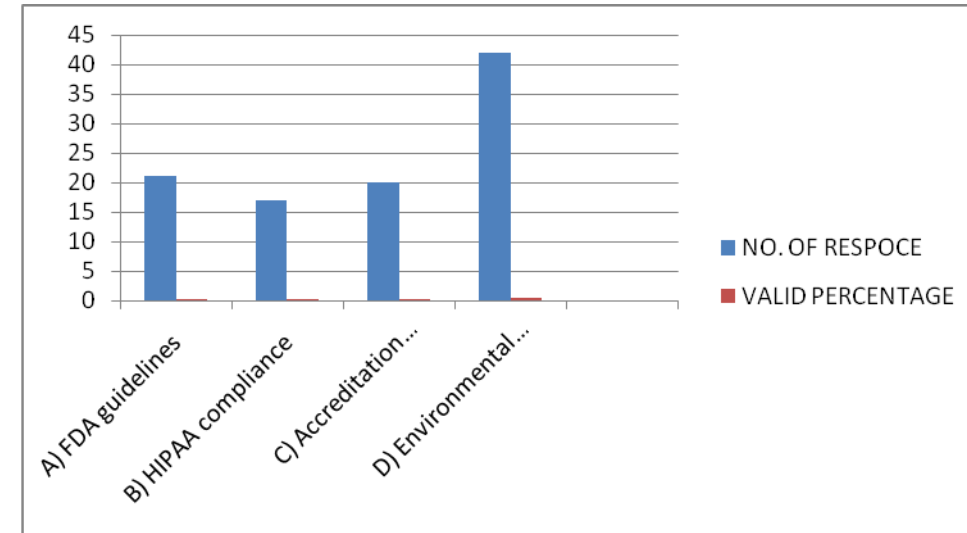
NUMBER OF KEY OPINION LEADERS DURING THE SURVEY - 100

How would you rate the current effectiveness of inventory management in your hospital?



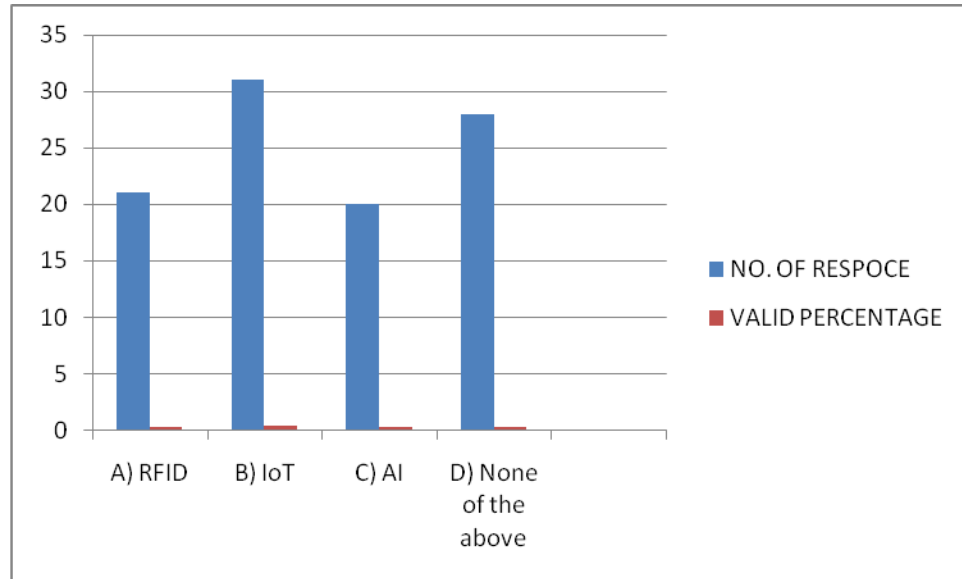
31% OF THE TOTAL SAMPLE ARE EFFECTIVENESS OF INVENTORY MANAGEMENT IN HOSPITAL FOLLOWED BY FAIR WHICH WAS 29%.

Which regulatory aspect of medical supplies management concerns you the most?



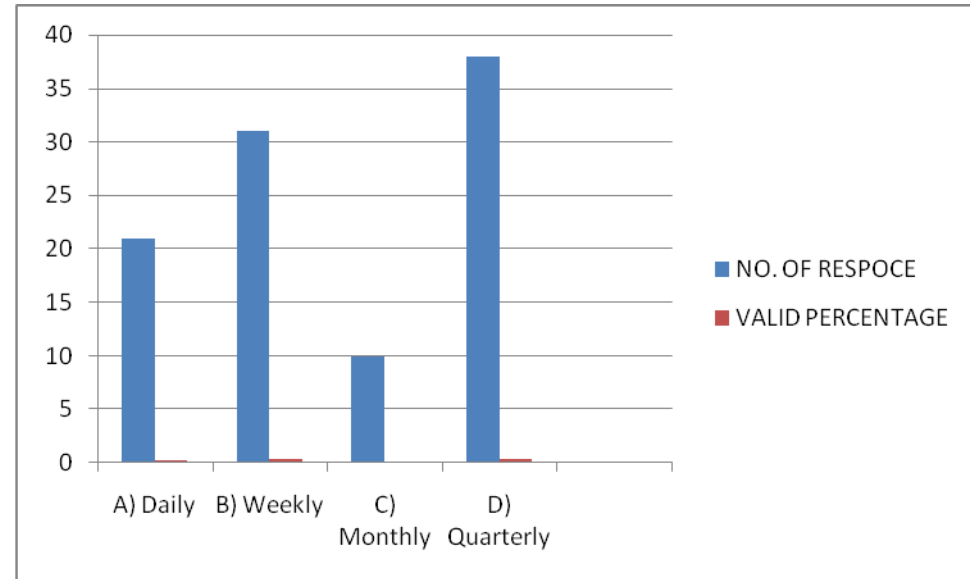
42% OF THE TOTAL SAMPLE ARE REGULATORY ASPECT OF MEDICAL SUPPLIES MANAGEMENT FOLLOWED BY HIPAA COMPLIANCE

Which technology do you believe would most improve inventory tracking and visibility?



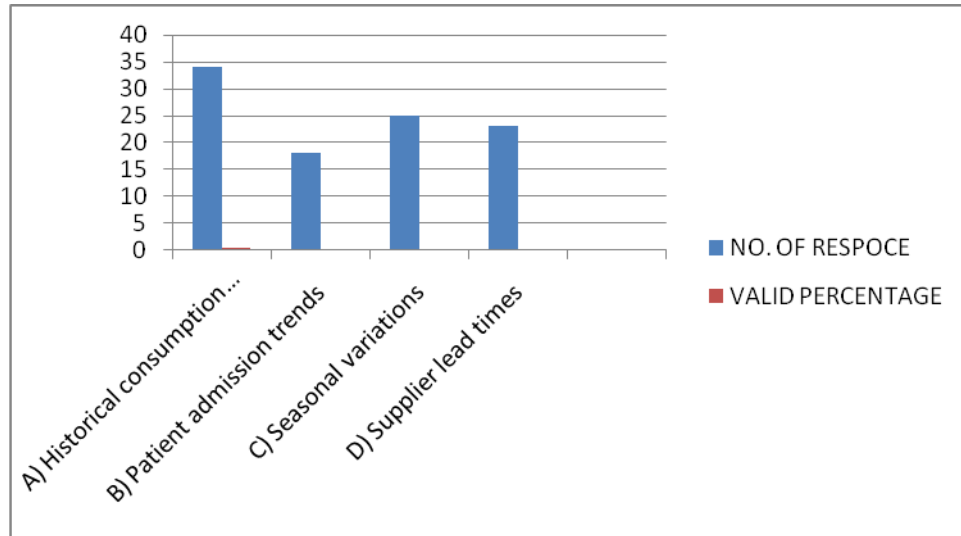
Approximately 31% of IOT IS MOST IMPROVE INVENTORY TRACKING AND VISIBILITY AS FOLLOWED BY RFID IS 21%

How often do you conduct demand forecasting for medical supplies?



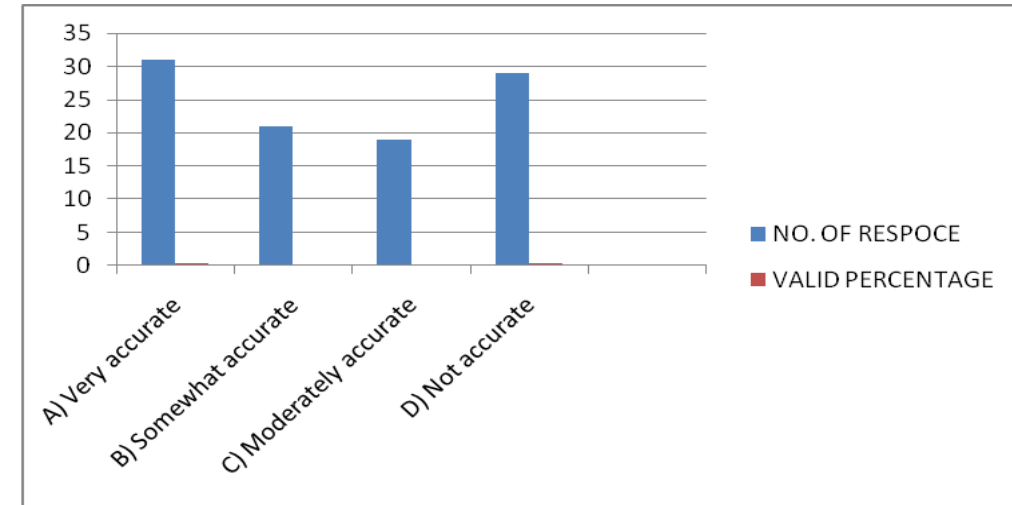
About 38% QUATERLY CONDUCT DEMAND FORECASTING FOR MEDICAL SUPPLIES FOLLOWED BY THE DAILY 21%

Which factor most influences your decision-making in inventory replenishment?



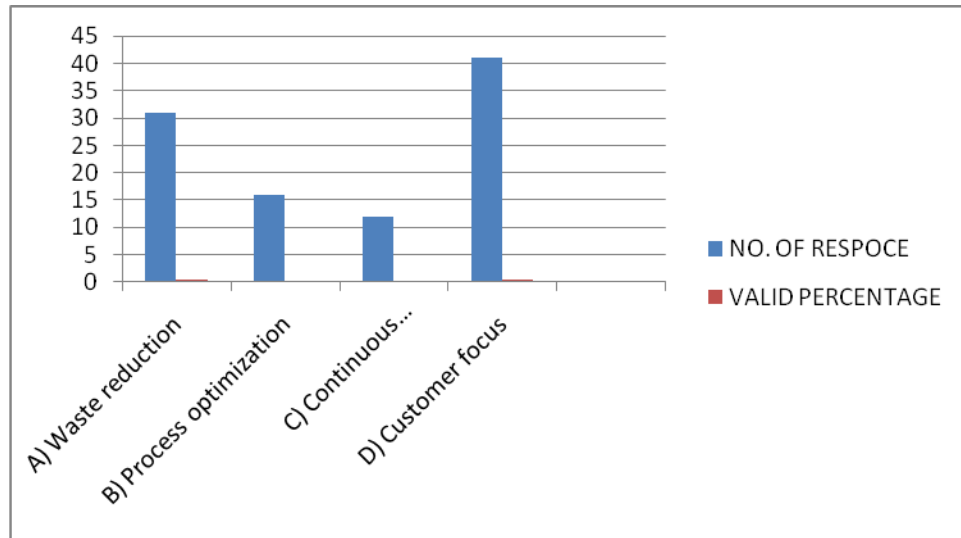
25% ARE SEASONAL VARIATIONS ARE INFLUENCES THE DECISION MAKING IN INVENTORY REPLENISHMENT IN COMAPRISON TO THE PATIENT ADMISSION TRENDS18%

How would you rate the accuracy of your current demand forecasting methods?



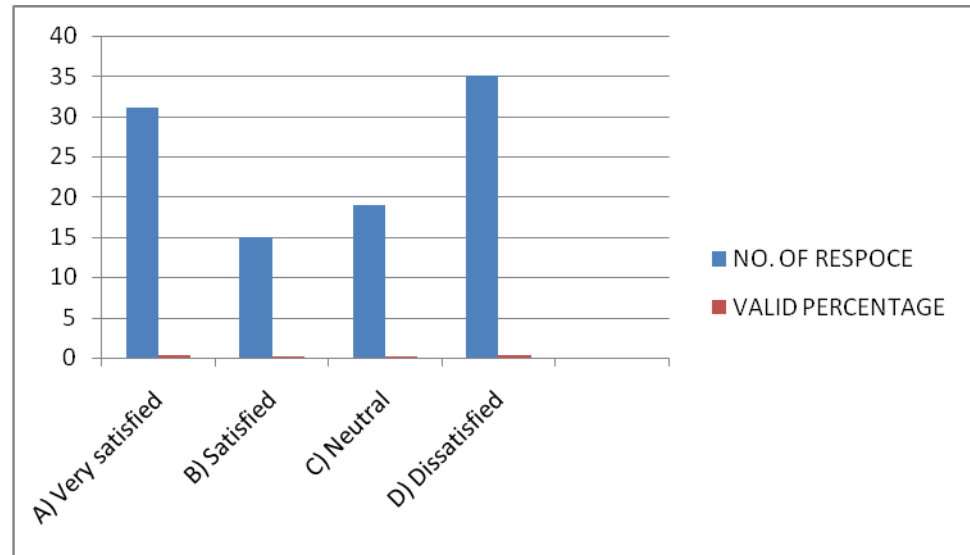
31% ARE THE ACCURACY OF THE CURRENT DEMAND FORECASTING METHOD IN THE TOTAL SAMPLE SIZE

Which lean principle is most important in healthcare supply chain management?



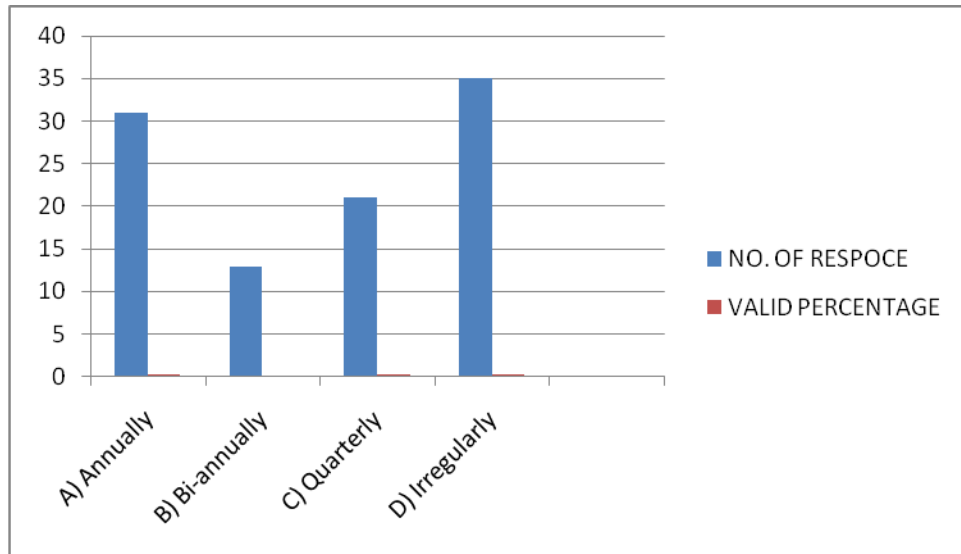
41% CUSTOMER FOCUS ARE THE LEAN PRINCIPLE IS MOST IMPORTANT FOLLOWED BY THE PROCESS OPTIMIZATION 16%

How satisfied are you with the current level of collaboration with your medical suppliers?



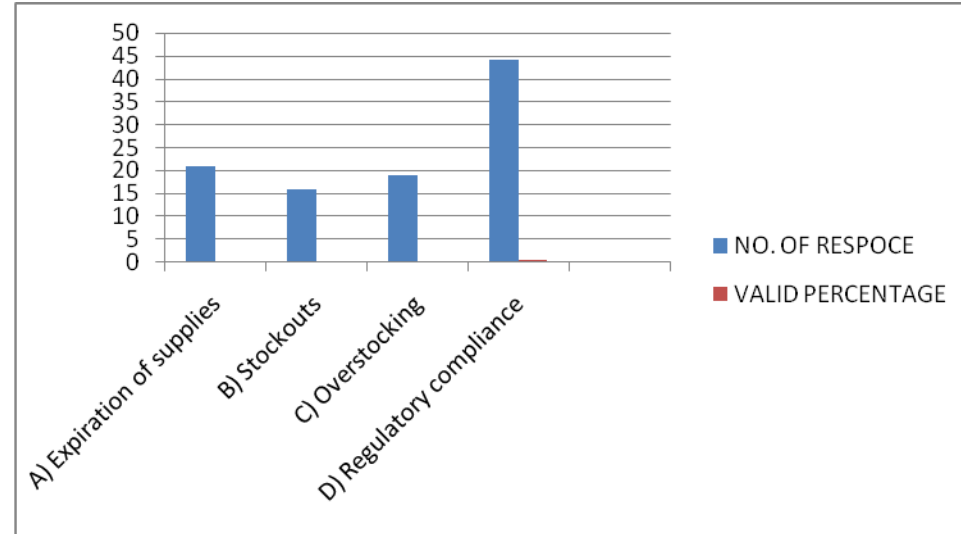
35% ARE DISSATISFIED WITH THE CURRENT LEVEL OF COLLABORATION WITH EFOLLOWED BY SATISFIED 15% OF THE TOTAL SAMPLE

How often do you review and update your inventory management policies and procedures?



35% OF IRREGULARLY ARE REVIEW OF UPDATE IN INVENTORY MANAGEMENT POLICIES AND PROCEDURES IN COMPARISION ANNUALLY 31%

What is the biggest challenge you face in managing medical supplies inventory?



44% OF REGULATORY COMPLIANCE ARE THE BIGGEST CHALLENGE ARE FACE IN MANAGING MEDICAL SUPPLIES INVENTORY

RECOMMENDATIONS

- ☐ Implement automation tools for inventory tracking and management.
- ☐ Conduct regular audits of inventory practices and make necessary adjustments to optimize performance continually.
- ☐ Implement just-in-time (JIT) inventory system to minimize excess stock and reduce waste.
- ☐ Foster collaborative relationship with suppliers to ensure reliable and timely supply of medical items

CONCLUSION

- ▶ In conclusion, this study has explored the complexities and criticalities involved in optimizing medical supplies inventory management within hospitals from a supply chain perspective.
- ▶ The research aimed to address the challenges faced by healthcare institutions in ensuring the availability of essential medical supplies while controlling costs, minimizing waste, and enhancing overall operational efficiency.

References

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THANK YOU!