

**STUDY TO ASSESS THE QUALITY OF SERVICES AT THE MATERIAL
MANAGEMENT DEPARTMENT OF APOLLO MULTISPECIALTY HOSPITAL,
KOLKATA**

Dissertation Submitted to



The IIHMR University, Jaipur

for the partial fulfilment for the award of the degree of

Master of Business Administration (MBA)

in

Hospital and Health Management

By

Diksha Agrawal

Under the Supervision and Guidance of

Mr. S.P. Chattopadhyay

2024

Date: 27-06-2024

TO WHOM IT MAY CONCERN

This is to certify that **Ms. Diksha Agrawal** has done her internship with us from 28th March 2024 to 27th June 2024, in the "Supply Chain Management".

She has completed her internship on "A study to assess the quality of services at the Materials Management department" at Apollo Multispecialty Hospitals, Kolkata.

During the period of her internship program with us, she was found diligent, hardworking and inquisitive.

We wish her all the best for future.

For Apollo Multispecialty Hospitals Limited, Kolkata.



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DECLARATION BY STUDENT

I hereby declare that this dissertation "**A Study to assess the quality of services at the Material Management Department of Apollo Multispecialty Hospital, Kolkata**", is the bonafide record of my original research work. I declare that it has not been submitted to any other university or institution for the award of any degree or diploma. Information derived from the published or unpublished work of others has been duly acknowledged in the text.

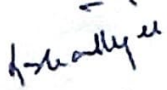
Diksha
(Signature)

Name of Student: Diksha Agrawal

Date: 03rd July, 2024

CERTIFICATE

This is to certify that dissertation titled “A Study to assess the quality of services at the Material Management department of Apollo Multispecialty Hospital, Kolkata” is a record of the research work undertaken by Ms. Diksha Agrawal in partial fulfillment of the requirements for the award of the degree of MBA (Hospital and Health Management) from the IIHMR University, Jaipur under my guidance and supervision and her approach to the research study has been sincere, scientific, and analytical.

A handwritten signature in black ink, appearing to read 'S.P. Chattopadhyay'.

Mr. S.P Chattopadhyay
Faculty Guide
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Date

A handwritten signature in black ink, appearing to read 'Sanjay Gupta'.

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Date 02/07/2024.

ABSTRACT

Material management in hospitals involves systematic planning, purchasing, warehousing, and distribution of essential medical supplies and equipment. It involves making available the right drug and supplies in the right quantity and right cost for the right patient at the right place and at the right time. It is crucial for operational efficiency, cost reduction, and patient care quality. Key components include inventory control, vendor management, cost management, quality assurance, technology integration, emergency preparedness, sustainability, and staff training. This research explores the quality of service in the Material Management Department at Apollo Multispecialty Hospital, focusing on procurement effectiveness, stock and supplier practices, and adherence to regulatory requirements. Recognizing strengths and weaknesses can enhance operational efficiency and ensure the hospital meets high standards for patient care and resource utilization.

Objectives-

1. To assess the Responsiveness of the Material Management Department.
2. To assess the communication skills and behaviour of the Material Management Team.
3. To assess Stock Availability at the Material Management Department.
4. To assess Current Hygiene Practices at the Material Management Department.
5. To assess the Accuracy and Completeness of the records at the Material Management Department.
6. To assess the Accessibility of the team on addressing the inquiries.

Methodology-

This descriptive cross-sectional study was conducted at Apollo Multi-specialty Hospitals, Kolkata, a tertiary care hospital with over 50 specialties and 33 centres of excellence. The study included 50 nursing and housekeeping staff who were willing to participate and knew English and Bengali language. The study was conducted from March 2024 to June 2024, with a sample size of 50 people. Data was collected through a questionnaire in Google forms.

Conclusion-

The Material Management department at Apollo Hospital, Kolkata has received positive feedback overall, with commendable performance in various areas. However, there are specific areas that require attention:

Improvement Areas:

Enhancing responsiveness, as 56% of respondents feel it should be improved.

Developing communication skills and behaviour, as 22% of respondents suggest improvement.

Increasing human resources, as 12% of respondents feel there is a need for more staff.

Reducing delivery time for supplies, as around 10% of respondents believe it should be improved.

Positive Aspects:

Majority of respondents rated the accuracy and completeness of records, availability of supplies, cleanliness, and organization positively.

The accessibility of the material management department for addressing staff queries was also rated positively.

Keywords- Material Management, Inventory Control

ACKNOWLEDGEMENT

When emotions are profound, words may not be enough to express thanks and gratitude. The wisdom, commitment and efforts of many people made me transform this manuscript as it is being developed.

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I wish to convey my thanks to my colleagues for their co-operation, dedication and support best owed to be during the entire course of work.

Last but not the least I owe my lots of gratitude to my beloved parents, their support and faith in me as they always inspired me to do my best.

All efforts have been fruitful with the grace and blessings of the almighty god.

Sincerely,

Diksha Agrawal

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ABBREVIATIONS

GRN	Goods Receipt Note
SRV	Store Receipt Voucher
PO	Purchase Order
PR	Purchase Request/Requisition
CRS	Central Receiving Store

1. INTRODUCTION

Material management in hospitals refers to the systematic planning, purchasing, warehousing and distribution of drugs, medical supplies and equipment that are vital for patient care.

Effective material management ensures that healthcare facilities have the right resources available at the right place, at the right time, in the right quantities, and at the right cost.

This discipline is critical to maximizing operational effectiveness, cutting expenses, preventing shortages, and guaranteeing patients receive high-quality medical care.

Important elements include managing vendors and inventory in a way that satisfies patients' needs and applicable healthcare standards.

Additional factors pertaining to hospital material management include as follows:

1. **Inventory control:** To avoid stockouts or overstocking, this entails keeping an eye on and controlling the amount of medical equipment and supplies in stock. Accurate item tracking is frequently made possible by advanced inventory systems like barcoding and RFID (Radio Frequency Identification).

2. **Procurement:** The process of looking for trustworthy suppliers who can meet healthcare requirements and offer high-quality medical products at reasonable costs.

3. **Distribution and Logistics:** The transfer of supplies across the hospital via warehousing, transportation, and distribution to different departments, guaranteeing prompt availability when required.

4. **Cost Management:** Assess the expenses related to resources and put strategies into place to reduce spending without compromising patient care or quality.

5. **Quality Assurance:** Verify that all materials, including adherence to quality control procedures and certifications, satisfy regulatory criteria and are safe for use by patients.

6. **Vendor Management:** This entails building and preserving connections with vendors and suppliers in order to negotiate agreements, keep an eye on performance, and guarantee material delivery on schedule.

7. **Technology Integration:** Managers may increase productivity, simplify procedures, and make well-informed judgments about material management with the help of information systems and technological solutions.

8. **Emergency Preparedness:** Making backup plans and maintaining emergency supplies to deal with unforeseen spikes in demand or interruptions to the supply chain.

9. **Sustainability:** promoting environmentally friendly methods of handling materials, such as trash reduction and recycling initiatives, among other things.

10. **Staff Education & Training:** Healthcare personnel should receive training on safe handling techniques, best practices, and material handling techniques.

The ultimate goal of efficient material management in hospitals is to enable medical professionals to offer patients with high-quality treatment by making sure that the resources they require are available when and where they are most needed.

The purpose of this study is to investigate the level of customer service provided by Apollo Multispecialty Hospital's material management department. Apollo Hospital's dedication to offering top-notch medical treatment is one of its defining characteristics, and as such, its material management procedures play a significant role in its operational excellence. The purpose of this study was to offer insights on how Apollo Multispecialty Hospital may further optimize their material management procedures by concentrating on a number of different areas, including supplier and stock management procedures, procurement effectiveness, and regulatory compliance.

Recognizing strengths and weaknesses of Material Management Department could not only contribute towards enhancing operational efficiency but also ensuring that the hospital continues meeting highest standards for patient care and resource utilization. This study reminds us about continuous improvement and improvement within hospital's material management with changing healthcare needs, best industry practices.

Objectives for the study to assess the quality of services at the Material Management Department of Apollo Multispecialty Hospital:

1. **Assess the Responsiveness of the Material Management Team:** Determine how quickly the team responds to requests for equipment and supplies from different hospital departments by looking at things like the turnaround time between the request's inception and fulfilment.
2. **Assess the communication skills and behaviour of the Material Management Team:** Evaluate the Material Management team members' interactions with hospital employees, suppliers, and other parties involved in the supply chain and procurement processes.

3. **Assess Stock Availability:** To satisfy the needs of hospital operations and patient care, determine if the Material Management Department has an adequate supply of necessary medical supplies and equipment.
4. **Assess Current Hygiene Practices::** Determine how well the Material Management Department maintains cleanliness and hygiene standards, including workstations, storage spaces, and protocols for handling medical equipment and supplies.
5. **Assess the Accuracy and Completeness of the records::** Make sure that the Material Management Department's records about supply, inventory, and procurement transactions are correct, comprehensive, and current.
6. **Assess the Accessibility of the team on addressing the inquiries:** Determine the team members' level of accessibility in responding to questions on handling, the availability of medical equipment and supplies, and the estimated time of delivery.

Material Management at Apollo Multispecialty Hospital, Kolkata

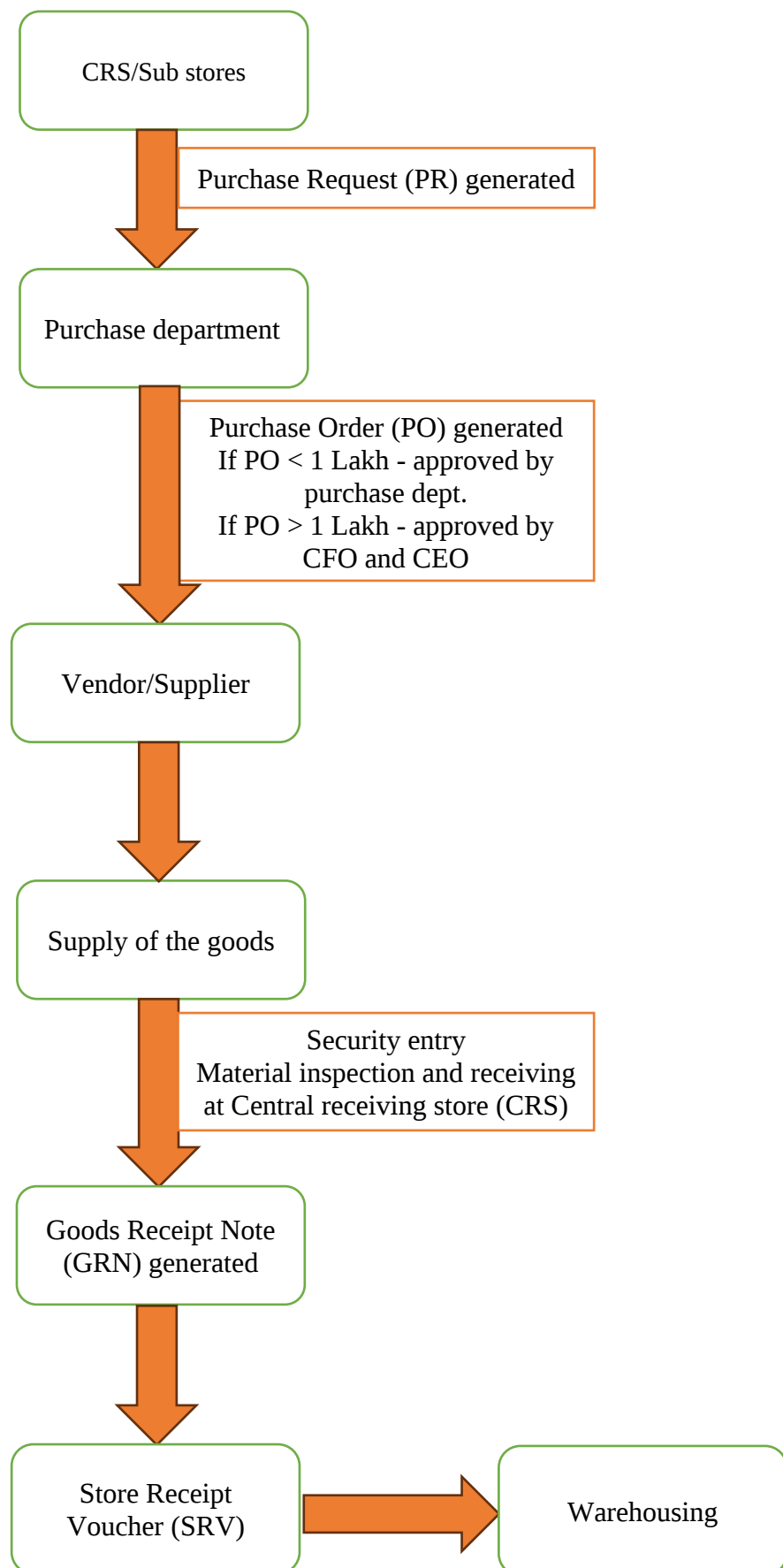


Figure 1.1

Important Definitions:

Purchase Request (PR)- A formal document called a "Purchase Request" is sent to a company's purchasing or procurement department by a department to get approval to buy goods or services that are needed for operations.

Purchase Order (PO)- A PO is an official document provided by a buyer to a seller, which legally binds both parties to a purchase transaction. It contains essential details such as the Purchase Order number, information about the buyer and seller, date of issuance, description of the goods or services, delivery and payment terms, terms and conditions, and authorized signatures.

Goods Receipt Note (GRN)- A GRN is a document commonly utilized in procurement and logistics to verify the delivery of supplies from a supplier. It acts as evidence that the goods requested in the purchase order have been delivered according to the specified terms.

Store Receipt Voucher (SRV)- A SRV is a document used internally within the organization to record the receipt of goods into the store. Once the GRN is done it is followed by the SRV to take the goods into stock.

2. LITERATURE REVIEW

Authors (Study Year)	Study Location	Sample Size	Sampling Technique	Salient Features
Hem Chandra et al. (01 January 2013)	Asia	NA	NA	The study article discusses the financial difficulties that big hospitals encounter during recessions, which might cause problems with financial accessibility. In order to address these issues, the paper presents a novel mechanism known as the Hospital Revolving Fund (HRF). Maintaining the quality of services and ensuring constant supply availability were the essential objectives. (1)
Ola Mousa et al. (25 May 2022)	Saudi Arabia	58 healthcare professionals	Convenience sampling	The purpose of the study was to determine how satisfied staff members were with the logistical services provided by King Faisal Hospital, as well as their availability and quality. A systematic questionnaire was used in a cross-sectional study to gather information on staff opinions regarding the availability and calibre of logistical services. The majority of participants—63.8% of them expressed favourable views and 36.2% expressed neutral opinions—thought that the logistics services were of good quality and were readily available. (2)
Bhupendra S. Modi (01 August 2017)	Gandhidham	NA	NA	In order to improve service delivery and overall operational effectiveness, the article intends to investigate the factors that influence the use of contemporary material management tools at an urban health centre in Gandhi Dham.

				The success of an organization is ultimately impacted by materials management, which focuses on controlling material flow in response to factors like demand, price, availability, and quality. This helps to ensure that resources are used wisely and efficiently. (3)
Rachel Karimah et al. (20 December 2022)	Indonesia, Central Java	11 articles based on inclusion criteria	NA	This paper provides a thorough analysis of the logistics management process that hospitals use to handle medical consumables. It covers all of the important steps, including planning, budgeting, acquiring, receiving, storing, maintaining, distributing, controlling, disposing of, documenting, reporting, and evaluating. It emphasizes how important excellent logistics management is to ensuring healthcare services are safe, effective, high-quality, accessible, equitable, and reasonably priced. The study utilized a narrative review methodology to ascertain the variables impacting the medical consumables supply chain. (4)
Nanati Legese et al. (11 April 2022)	Ethiopia	3 years of data from 2013/14 to 2015/16	NA	Using ABC, VEN, and ABC-VEN matrix approaches, the study looked at a three-year inventory of medical supplies at a tertiary teaching hospital in Ethiopia and provided suggestions for making the most of the facility's limited funding. The data was obtained from the hospital's computer system by qualified pharmacists, and Microsoft Excel was used for the analysis. (5)

3. METHODOLOGY

- **Study design:** Descriptive Cross-sectional study
- **Setting:** The study was held at Apollo Multi-specialty Hospitals, Kolkata. It is a tertiary care hospital, established in the year 2003 having a capacity of 750 beds. It has over 50 specialties and 33 centers of excellence.
- **Study population:** It included all the nursing and housekeeping staffs who came to receive the material and supplies for their respective departments.
- **Inclusion criteria:** Nursing and housekeeping staffs who wanted to take part in the study. People who were proficient in English and Bengali language.
- **Exclusion criteria:** Employees of the Material Management department were excluded as they could bring some possible biasness with them. Nursing and housekeeping staff who were not interested to participate in the study. People who did not know English and Bengali language.
- **Study tools:** Primary data was collected through a questionnaire in the Google forms. Data analysis was done using Ms. Excel.
- **Study duration:** The study was taken place from March 2024 to June 2024.
- **Sample size:** 50 people including nursing and housekeeping staffs who wanted to take part in the study.
- **Sampling technique:** Simple random sampling was done to assess their level of satisfaction.
- **Data collection procedure:** Primary data was collected through a questionnaire in the Google forms.

4. RESULTS AND DISCUSSION

OBJECTIVE 1. Assess the Responsiveness of the Material Management Team:

2. আপনি উপাদান ব্যবস্থাপনা দলের প্রতিক্রিয়াশীলতা কিভাবে রেট করবেন? (How would you rate the responsiveness of the material management team?)

50 responses

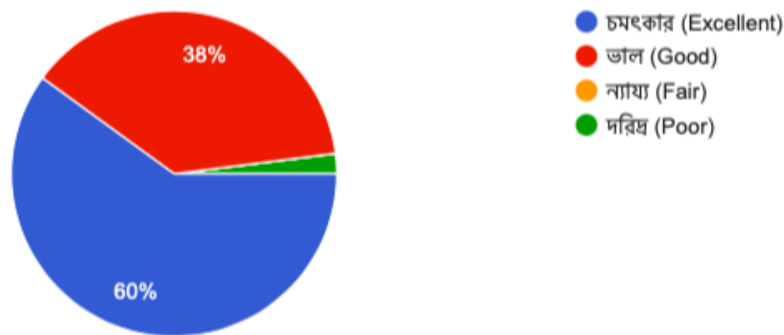


Figure 4.1 Responsiveness of the Material Management Team

Figure 4.1 implies the Rate of Responsiveness of the Material Management team. The survey was filled by the nursing and housekeeping staffs. Majority of the respondents rate the responsiveness of the material management department as Excellent. 38% of the respondents rate the responsiveness of the material management department as Good. Only a small fraction i.e., 2% of the respondents rate the responsiveness of the material management department as Poor.

To improve the responsiveness of the material management team, here are some strategies that can be implemented:

- **Establish Transparent Expectations:** Precisely outline the roles, duties, and performance standards for team members. This practice aids in defining clear objectives and ensures accountability.
- **Enhance Communication Channels:** Implement clear and efficient communication channels within the team and with other departments. Utilize tools like messaging platforms, emails, and regular meetings to ensure effective communication.
- **Feedback System:** Implement a feedback mechanism allowing team members to offer insights on existing processes and propose enhancements. Consistent feedback sessions can assist in pinpointing areas requiring attention.
- **Streamline Processes:** Review and streamline material management processes to eliminate bottlenecks and improve efficiency.

OBJECTIVE 2. Assess the communication skills and behavior of the Material Management Team:

5. আপনি উপাদান ব্যবস্থাপনা দলের যোগাযোগ দক্ষতা কিভাবে রেট করবেন? (How would you rate the communication skills and behaviour of the material management team?)

50 responses

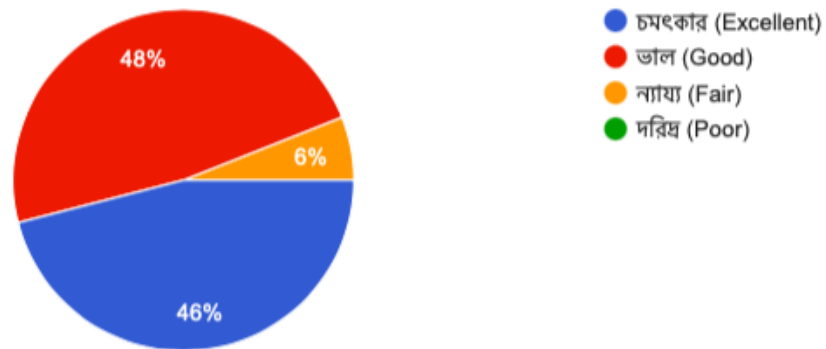


Figure 4.2 Communication skills and behaviour of the Material Management Team

Figure 4.2 implies the communication skills and behaviour of the Material Management department. The survey was filled by the nursing and housekeeping staffs. 46% of the respondents rate the communication skills and behaviour of the material management department as Excellent. 48% of the respondents rate the communication skills and behaviour of the material management department as Good. Only 6% of the respondents rate the communication skills and behaviour of the material management department as Poor.

Majority of the respondents have a positive view of the material management team's communication skills and behaviour.

No respondent rated the team's communication skills and behaviour as poor.

To improve the communication skills and behaviour of the material management team, here are some strategies that can be implemented:

- **Regular Training Programs:** Conduct regular training sessions focused on communication skills, including active listening, clear articulation, and professional behavior. This can help team members improve their interpersonal skills.
- **Feedback Mechanism:** Implement a robust feedback mechanism where team members can receive constructive feedback on their communication skills and behaviour. This can help them identify areas for improvement.
- **Recognize and Reward:** Recognize and reward team members who demonstrate excellent communication skills and professional behaviour. This can motivate others to improve their skills.

OBJECTIVE 3. Assess Stock Availability at the Material Management Department:

6.উপাদান ব্যবস্থাপনা বিভাগে সরবরাহের প্রাপ্যতা নিয়ে আপনি কতটা সন্তুষ্ট? (How satisfied are you with the availability of supplies in the material management department?)

50 responses

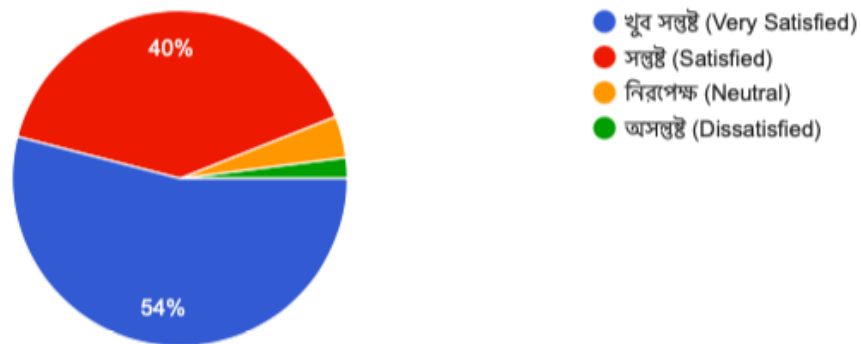


Figure 4.3 Stock Availability at the Material Management Department

Figure 4.3 implies the availability of stock at the Material Management department. The survey was filled by the nursing and housekeeping staffs. 54% of the respondents are Very Satisfied with the availability of stock at the Material Management department. This indicates that most respondents are very satisfied with the availability of supplies. 4% of the respondents are neutral about the availability of supplies. 40% of the respondents are Satisfied with the availability of stock at the Material Management department. Only a small fraction i.e., 2% of the respondents are Dissatisfied with the availability of stock at the Material Management department.

Majority of the respondents have a positive view of the availability of supplies in the material management department. A small percentage of respondents are Neutral or Dissatisfied.

To improve the availability of stock at material management department, here are some strategies that can be implemented:

- **Safety Stock:** Maintain a safety stock of critical supplies to buffer against unexpected demand spikes or supply chain disruptions. This can ensure continuous availability of essential materials.
- **Supplier Diversification:** Diversify the supplier base to reduce dependency on a single supplier. This can help in reducing the risks associated with supply chain disruptions from any one supplier.

- **Feedback Mechanism:** Establish a feedback mechanism where employees can report issues related to supply availability. This can help in identifying and addressing problems quickly.

OBJECTIVE 4. Assess the Cleanliness and organization of storage at the Material Management Department:

4.উপাদান ব্যবস্থাপনা দল দ্বারা পরিচালিত এলাকার সংগঠন এবং পরিচ্ছন্নতা নিয়ে আপনি কতটা সন্তুষ্ট?
(How satisfied are you with the cleanliness and organisation of storage area managed by the material management team?)

50 responses

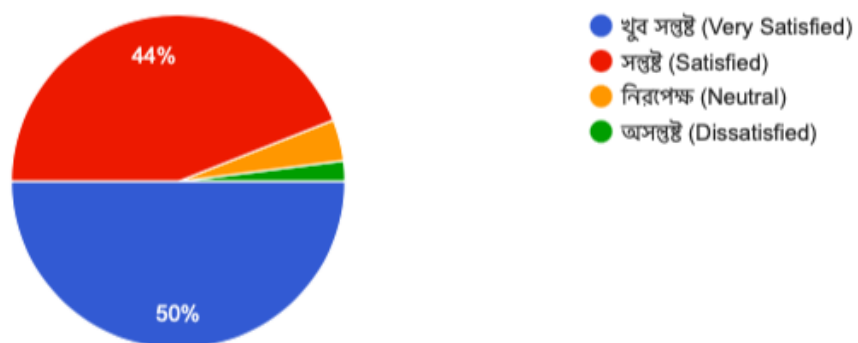


Figure 4.4 Cleanliness and organization of storage at the Material Management Department

Figure 4.4 implies the cleanliness and organization of storage at the Material Management department. The survey was filled by the nursing and housekeeping staffs. 50% of the respondents are Very Satisfied with the cleanliness and organization of storage. 44% of the respondents are Satisfied with the cleanliness and organization of storage. 4% of the respondents had neutral opinion about the cleanliness and organization of storage. Only 2% of the respondents are Dissatisfied with the cleanliness and organization of storage.

Majority of the respondents have a positive view of the cleanliness and organization of storage at material management department. A small percentage of respondents are Neutral or Dissatisfied.

To improve the cleanliness and organization of storage at material management department, here are some strategies that can be implemented:

- **Regular Cleaning Schedule:** Establish a regular cleaning schedule for the storage areas to ensure cleanliness is maintained. Assign specific staff members responsible for cleaning and organizing the storage spaces.

- **Invest in Storage Solutions:** Invest in storage solutions such as shelving units, bins, and labelling systems to optimize space and facilitate easy access to supplies. Utilize clear containers for better visibility.

OBJECTIVE 5. Assess the Accuracy and Completeness of the records at the Material Management Department:

7.আপনি উপাদান ব্যবস্থাপনা দলের দ্বারা রক্ষণাবেক্ষণ রেকর্ডের নির্ভুলতা কিভাবে রেট করবেন? (How would you rate the accuracy of records maintained by the material management team?)

50 responses

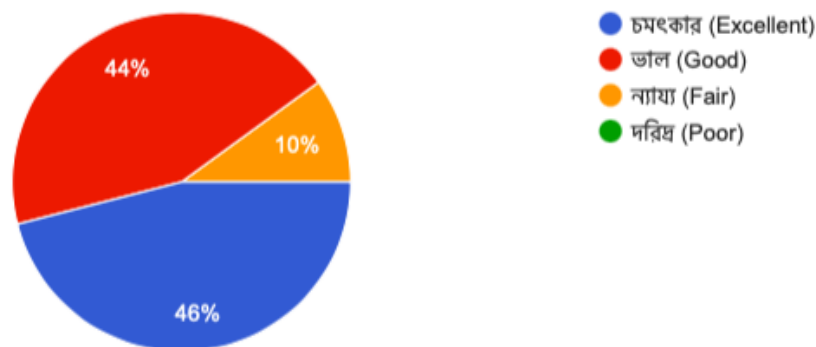


Figure 4.5 Accuracy and Completeness of the records at the Material Management Department

Figure 4.5 implies the Accuracy and Completeness of the records at the Material Management Department. The survey was filled by the nursing and housekeeping staffs. 46% of staff rate the accuracy and completeness of the records at the Material Management department as Excellent. 44% of staff rate the accuracy and completeness of the records at the Material Management department as Good. Around 10% of staff rate the accuracy and completeness of the records at the Material Management department as Fair.

No respondent rated the accuracy and completeness of the records as Poor.

To improve the accuracy and completeness of the records at material management department, here are some strategies that can be implemented:

- **Utilize barcode or RFID technology:** Implementing barcode or RFID systems can streamline data entry processes and reduce human errors in recording inventory.

- **Regular communication:** Foster open communication between departments to make sure that all important information is recorded correctly.
- **Education & Training :** Train the staff members on proper inventory management practices, data entry procedures, and the importance of accurate record-keeping.

OBJECTIVE 6. Assess the Accessibility of the team on addressing the inquiries

3. আপনি অনুসন্ধানের সমাধানের জন্য উপাদান ব্যবস্থাপনা বিভাগের অ্যাক্সেসযোগ্যতাকে কীভাবে মূল্যায়ন করবেন? (How would you rate the accessibility of the material management department for addressing the inquiries?)

50 responses

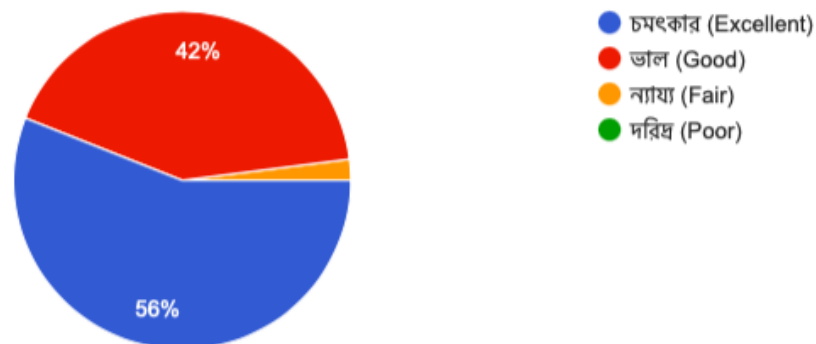


Figure 4.6 Accessibility of the team on addressing the inquiries

Figure 4.6 implies the rate of accessibility of the material management department for addressing the queries of the staff. The survey was filled by the nursing and housekeeping staffs. 56% of the respondents rated the accessibility of the Material Management department as Excellent. 42% of the respondents rated found the accessibility of the Material Management department as Good. Around 2% of the respondents rated found the accessibility of the Material Management department as Fair. Majority of the respondents have a positive view of the accessibility of the material management department for addressing the queries of the staff. No respondent rated the accessibility as Poor.

To improve the accessibility of the material management department for addressing the inquiries, here are some strategies that can be implemented:

- **Designated Point of Contact:** Assign a specific person or team within the material management department to handle queries. This helps in streamlining the process and ensures accountability.

- **Feedback Mechanism:** Implement a feedback mechanism to gather input from users on their query resolution experience. This can help in identifying areas for improvement.

8.উপাদান ব্যবস্থাপনা বিভাগের কোন দিক সবচেয়ে উন্নতি প্রয়োজন? (Which aspect of the material management department needs the most improvement?) [Copy](#)

50 responses

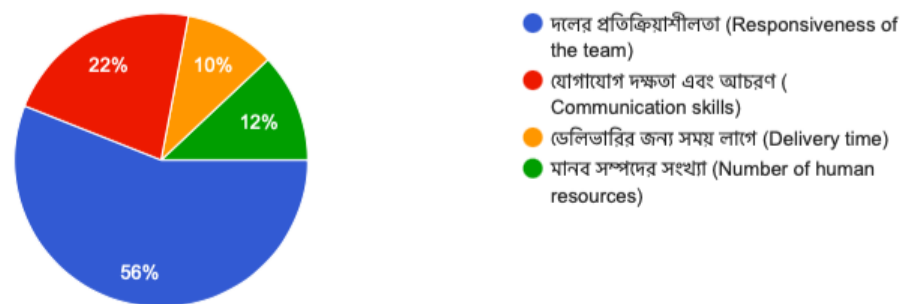


Figure 4.7 Factors requiring immediate improvement

Figure 4.7 implies the factors of the material management department that needs the most improvement. The survey was filled by the nursing and housekeeping staffs. 56% of the respondents think that the responsiveness of the team should be improved. 22% of the respondents think that the communication skills and behavior of the team should be improved. 12% of the respondents think that the number of human resources should be improved at the material management department. Around 10% of the respondents think that the delivery time of the supplies should be improved.

5. CONCLUSION

- It can be clearly interpreted that the overall performance of the Material Management department of Apollo Hospital, Kolkata is quite good and commendable, but there are a few things which need to be amended and taken care of.
- Majority of the respondents (60%) have a positive view of the responsiveness of the material management department. Only a small fraction i.e., 2% of the respondents rate the responsiveness of the material management department as Poor.
- Majority of the respondents (48%) have a positive view of the material management team's communication skills and behaviour. No respondent rated the team's communication skills and behaviour as poor.
- Majority of the respondents (54%) have a positive view of the availability of supplies in the material management department. A small percentage of respondents are Neutral or Dissatisfied.
- Majority of the respondents (50%) have a positive view of the cleanliness and organization of storage at material management department. A small percentage of respondents are Neutral or Dissatisfied.
- Majority of the respondents rated the accuracy and completeness of the records as Excellent and Good. No respondent rated the accuracy and completeness of the records as Poor.
- Majority of the respondents have a positive view of the accessibility of the material management department for addressing the queries of the staff. No respondent rated the accessibility as Poor.
- 56% of the respondents think that the responsiveness of the team should be improved.
- 22% of the respondents think that the communication skills and behaviour of the team should be improved.
- 12% of the respondents think that the number of human resources should be improved at the material management department.
- Around 10% of the respondents think that the delivery time of the supplies should be improved.

Factor	Response			
Responsiveness of the Team	60% (Excellent)	38% (Good)	0% (Fair)	2% (Poor)
Communication Skills and Behaviour of the Team	48% (Excellent)	48% (Good)	6% (Fair)	0% (Poor)
Availability of Supplies	54% (Very Satisfied)	40% (Satisfied)	4% (Neutral)	2% (Dissatisfied)
Cleanliness and Organisation of Storage	50% (Very Satisfied)	44% (Satisfied)	4% (Neutral)	2% (Dissatisfied)
Maintenance of Accurate and Complete Records	46% (Excellent)	44% (Good)	10% (Fair)	0% (Poor)
Accessibility of the team for addressing the Inquiries	56% (Excellent)	42% (Good)	2% (Fair)	0% (Poor)

Table 5.1 Responses of the respondents

REFERENCES

1. Hem, Chandra., Arvind, Vashishta, Rinkoo., Jitendra, Kumar, Verma., Shuchita, Verma., Rakesh, Kapoor., R., K., Sharma. (2013). Supply chain management with cost-containment & financial-sustainability in a tertiary care hospital.. *Journal of health and human services administration*, 36(1):3-23.
2. Ola, Mousa., Ali, Hussain, Al, Dihnayn., Hamidah, Mohammed, Ali, Busbieh., Mariam, Albutayan., Norah, Al, Omar., Aml, Sayed, Ali, Abdelrahem. (2022). Staff satisfaction with the quality of hospital's logistics services and materials. *International journal of frontiers in life science research*, 2(2):091-097. doi: 10.53294/ijflsr.2022.2.2.0046
3. Bhupendra, S., Modi. (2017). “determinants of modern tools for material management at urban health centre, gandhidham”. *World journal of pharmaceutical research*, 1361-1372. doi: 10.20959/WJPR20178-8992
4. Rachel, Karimah., Chriswardani, Suryawati., Septo, Pawelas, Arso. (2022). Review: medical consumable logistic management process in hospitals. *Medical sains: jurnal ilmiah kefarmasian*, 7(4):1005-1016. doi: 10.37874/ms.v7i4.554
5. Nanati, Legese., Dawit, Teshome., Teferi, Gedif. (2022). Inventory Management of Health Commodities in a Tertiary Teaching Hospital in Ethiopia. *Frontiers in Pharmacology*, 13 doi: 10.3389/fphar.2022.763909

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