

Optimizing Laundry In-source



OVERVIEW

- **INTRODUCTION**
- **METHODOLOGY**
- **FINDINGS**
- **CONCLUSION**
- **RECOMMENDATION**



INTRODUCTION

The main objective of the hospital's laundry services is to effectively and sufficiently offer clean, fresh linen for the comfort of patients, safety of patients and hospital staff, and to deliver prompt and reliable services that satisfy staff, patients, and visitors. The laundry services should provide high-quality linen for doctors and staff, including surgical gowns, aprons, pajamas, Kutras, coats, shirts, caps, masks, operating room towels, trolley covers, patient gowns, coats, shirts, and pajamas. Additionally, hospital linen should include drapes, tablecloths, bed sheets, pillowcases, and blankets.



ORGANIZATION PROFILE



Type	<u>Private</u>
Industry	<u>Healthcare</u>
Founded	2 April 2008
Headquarters	<u>Durgapur, West Bengal, India</u>
Key people	Dr. Satyajit Bose (Founder & Chairman)
Number of employees	2500

The Mission Hospital, (A Unit of Durgapur Medical Centre Pvt. Ltd.) is a 350-bed super-specialty hospital located in the Durgapur, West Bengal. Built in an area spanning three acres, it offers an array of facilities –

- Digital flat panel cath lab,
- Seven major operation theatres,
- 100-bed critical care unit,
- Mother and child care unit,
- 24-hour accident and emergency department, and blood bank

The Mission Hospital started its operation on April 2, 2008. This is the first specialty corporate hospital in Eastern India outside Kolkata



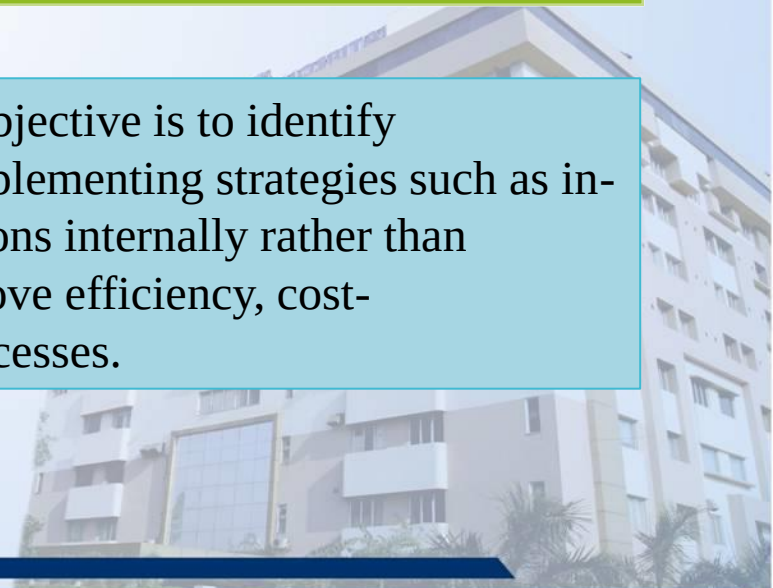
PURPOSE OF RESEARCH

Focusing on the laundry department and its operations.

To research the significance of hospital laundry services. The objective is to understand the importance of laundry services in hospitals, considering the impact on patient satisfaction, hygiene, and overall healthcare operations.

To research how hospitals handle their laundry operations. The objective is to study the current processes and practices employed by hospitals in managing their laundry operations, including the workflow, equipment, staffing, and quality control measures.

To research improving laundry in-sources. The objective is to identify opportunities for optimizing laundry services by implementing strategies such as in-sourcing, which involves managing laundry operations internally rather than outsourcing to external vendors. The aim is to improve efficiency, cost-effectiveness, and quality control in the laundry processes.



AIM & OBJECTIVES

AIM:-A study of optimizing of laundry in-source

RESEARCH OBJECTIVE

- To analyzes the importance of laundry service in hospitals
- To analyzes laundry management in hospital operations
- To analyzes How the optimization of Laundry In-sources can be done
- AMC Required





METHODOLOGY

Study Design: Observational

The time period is 2021 to 2023 .The study was conducted during the period of March 23 to May 23 at The Mission Hospital ,Durgapur

Study Population :- This includes study of observational study and data collected from a hard copy of linen stock available or missing from laundry

Inclusion criteria : Includes the data of all the ward of the hospital in the month of January ,February, March , April .

Exclusion Criteria : Linen Pilferage cannot be determine from the different ward so there is very difficult to identify the Linen.

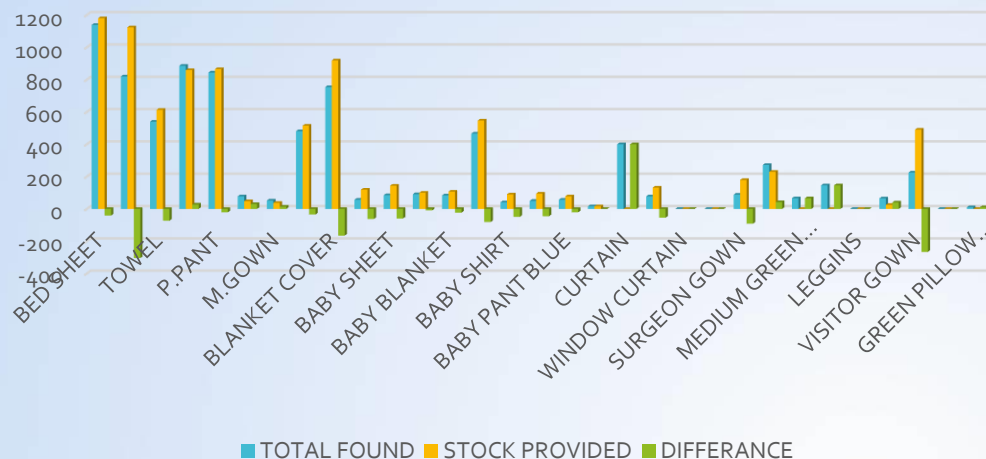
This data is collected from the hard copy of linen stock and data from the excel sheet

Analysis Of Data : Software Used Ms -Excel

FINDINGS



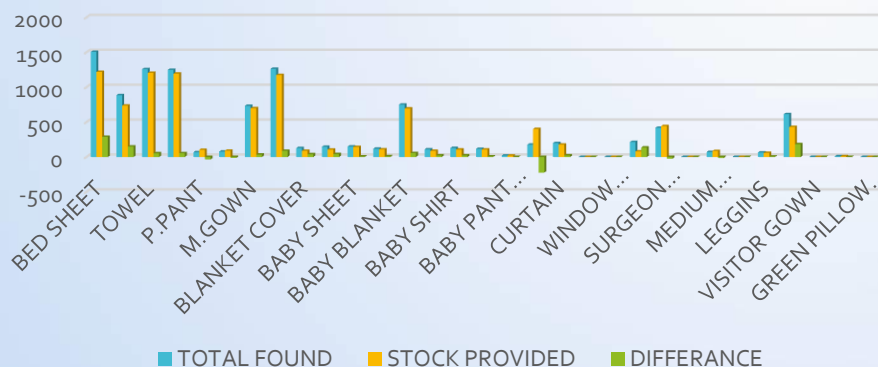
JAN 23



In The Month Of Jan
Total Linen Was

- Provided 8514
- Found 7891
- Difference 623

FEB 23

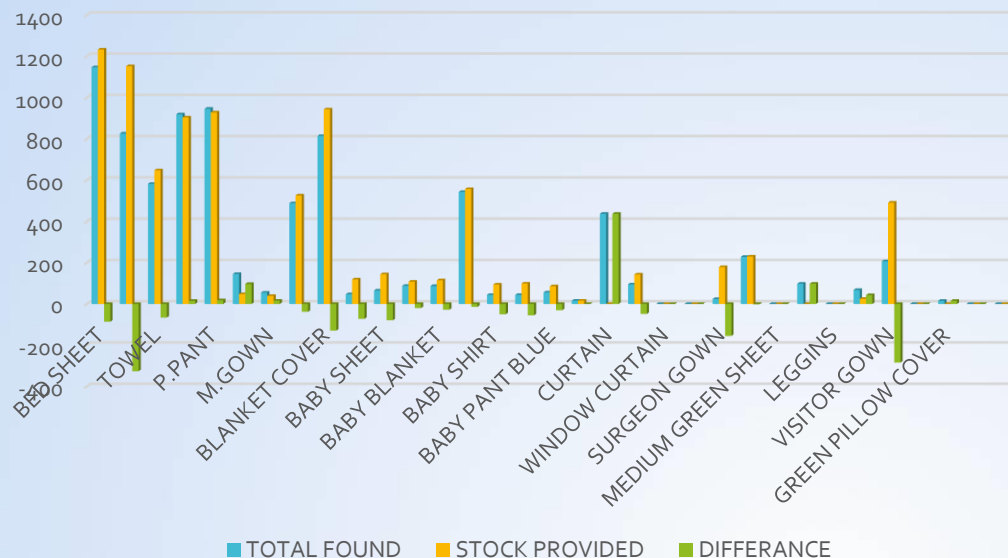


In The Month Of Feb
Total Linen Was

- Provided 8622
- Found 7671
- Difference 951



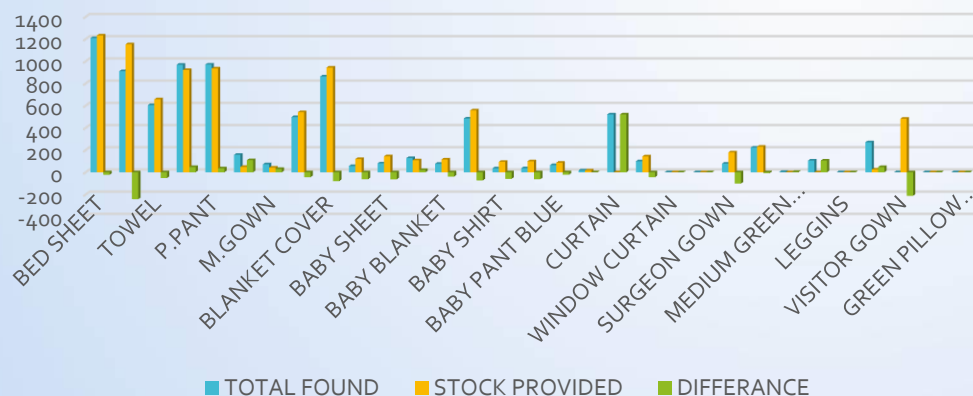
MARCH 23



In The Month Of Mar
Total Linen was

- Provided 8084
- Found 8027
- Difference 57

APRIL 23



In The Month Of April Total Linen was

- Provided 8868
- Found 8595
- Difference 273



Difference of Missing Data If Linen



PARTICULAR	JAN	FEB	MARCH	APRIL
BED SHEET	41	71	86	23
P.COVER	304	322	326	242
TOWEL	73	96	66	52
P.SHIRT	27	59	15	47
P.PANT	21	76	18	35
OT.GOWN	30	36	97	109
M.GOWN	14	35	16	30
BLANKET	34	30	38	44
BLANKET COVER	165	138	129	80
BABY FROCK	62	67	72	63
BABY SHEET	59	65	79	64
BABY GOWN	9	10	20	20
BABY BLANKET	23	25	28	39
PILLOW	81	57	14	73
BABY SHIRT	49	60	50	59
BABY PANT	45	51	55	63
BABY PANT BLUE	21	22	30	22
BABY PILLOW	0	0	0	0
CURTAIN	400	400	437	521
MAXI	54	26	48	44
WINDOW CURTAIN	0	0	0	0
BARMUDA	0	0	0	0
SURGEON GOWN	91	114	155	102
LARGE GREEN SHEET	42	3	2	8
MEDIUM GREEN SHEET	66	0	0	3
SMALL GREEN SHEET	146	85	98	105
LEGGINS	0	0	0	0
CUT SHEET	40	33	43	47
VISITOR GOWN	266	258	284	212
SUCCER BAG	0	0	0	0
GREEN PILLOW COVER	10	10	15	0

Conclusion

By considering the significance of laundry services, the facility design, organizational structure, employee qualifications and job satisfaction, and the management of material resources and equipment, Mission Hospital can optimize its laundry in-source, leading to enhanced hygiene standards, cost savings, and improved overall operational effectiveness by Implementing RFID-UHF Tags we can easily identify the type of losses of linen from the coming ward



SUGGESTION & RECOMMENDATION

- RFID Tagging: Each piece of linen is tagged with a UHF RFID tag. The tag contains unique identification information that can be read by RFID gates.
- Data Transmission: When a piece of dirty linen passes through the RFID gate, the tag information is read and transmitted to the server through the local area network (LAN).
- Database Update: The server updates the database with the status of the linen, marking it as "Dirty linen" and associating it with relevant information such as the patient or department.
- Hygienic Cleaning: The laundry facility performs the necessary cleaning and laundry procedures on the dirty linen before returning it to the hospital.
- RFID Gate Identification: When the washed linen passes through the RFID gate again, the tag is read, and the system updates the database with the status of the linen, marking it as "Cleaned linen."
- Additional Statuses: The system can also track other statuses such as linen loss, damaged linen, and the number of washing life-cycles. This information can be stored in the database for further analysis and inventory management.
- Monitoring and Web Application: A primary computer and web application can be used to monitor the data and the status of the linen. This allows for real-time tracking, reporting, and analysis of linen inventory and usage.

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THANK YOU

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