CHAPTER 01

Optimizing Laundry In-Source

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DOI: https://doi.org/10.52458/9789349381018.2025.eb.grf.ch-01
Ch.Id:- IIHMR/GRF/EB/RAHM/2025/Ch-01

INTRODUCTION

The Mission Hospital in Durgapur acknowledges the significance of efficient logistical operations in facilitating healthcare-related tasks. Nonetheless, there is ongoing debate regarding the effectiveness of relying solely on the expertise of individuals directly engaged in these operations. The objective of the final project was to implement Lean principles in the operations of Durgapur Mission Hospital, specifically focusing on optimizing the in-house laundry service. The decision to target the laundry department stemmed from its operational complexity and the lack of Lean understanding within the department [2]. Additionally, the laundry division was chosen due to its interconnectedness with other hospital departments and its crucial role in providing value to end-users, namely patients and staff. The primary aim of a hospital laundry facility is to ensure an efficient and sufficient supply of clean, fresh linens for patient comfort, as well as for maintaining patient and staff safety. It also aims to deliver a prompt and dependable service that meets the satisfaction of staff, patients, and visitors. Hospital laundry services encompass a wide range of linens, including surgical gowns, aprons, pajamas, shirts, caps, masks, drapes, and trolley covers, which require special attention due to their exposure to biofluid-produced dirt such as blood, urine, and facial secretions, posing a potential risk of disease transmission. Therefore, hospital laundry operations demand precision, quality, attention to detail, caution, and preparedness. Segregated areas within both the hospital and the laundry department are essential for separating clean and soiled linens. Additionally, the hospital should be equipped with a variety of washing, ironing, and drying machines to manage the significant volume of linens generated daily [1].

RESEARCH OBJECTIVES

1. To investigate the significance of hospital laundry services.
2. To analyze the procedures hospitals, employ in managing their laundry operations.
3. To explore methods to enhance in-house laundry facilities.

RESEARCH METHODOLOGY

The methodology for enhancing in-house laundry operations entailed a systematic approach aimed at identifying and resolving challenges within laundry processes. This comprehensive process encompassed various stages including issue identification, data collection, progression mapping, root cause analysis, solution development, implementation, monitoring and evaluation, and continuous improvement.

Additionally, the methodology incorporated quantitative analyses such as throughput analysis, resource utilization assessment, cost analysis, and error rate analysis. Throughput analysis involved measuring the volume of items processed within a specific timeframe to pinpoint bottlenecks and areas for enhancement. Resource utilization assessment evaluated machine usage, employee productivity, and consumption of laundry supplies to optimize resource allocation. Cost analysis entailed quantifying the expenses linked with outsourcing laundry services, comparing outsourcing costs to determine the most economical option. Error rate analysis focused on identifying and mitigating errors in the washing process, thereby enhancing overall efficiency and quality. By adhering to this methodology, hospitals systematically identified and tackled issues within their laundry operations, ultimately leading to improved efficiency, cost-effectiveness, and customer satisfaction.

RESULTS & DISCUSSION

The findings of the study encompassed several significant aspects. Firstly, it was revealed that hospital laundry operations faced constraints due to limited available space, highlighting the necessity of considering space requirements for efficient laundry management. Secondly, the study emphasized the importance of precise forecasting in the laundry industry, as strategic planning played a crucial role in streamlining processes, optimizing resource allocation, and improving overall efficiency. Moreover, the research indicated that bed linens at Mission Hospital exceeded the quality standards of other healthcare facilities, showcasing the hospital's commitment to providing patients with superior bedding. Additionally, favorable feedback from patients regarding the cleanliness and freshness of their bed sheets further reinforced the hospital's dedication to maintaining high standards. Lastly, the study found that a substantial majority of hospitals possessed adequate bed linen supplies, indicating that the demand for bedding was being met, although opportunities for enhancing the consistency of supply adequacy existed.

CONCLUSION

The study concluded that although optimizing laundry operations poses challenges, implementing best practices and strategies can yield numerous advantages. Utilizing dependable dispensers, intelligent technology platforms, and other enhancements can enhance customer satisfaction, financial viability, and environmental sustainability. Through meticulous planning and examination of current laundry procedures, the study pinpointed a significant issue concerning process evolution over time. The variability in priorities and materials received on a daily basis makes it challenging to accurately gauge actual

performance—a common challenge within the industry where laundry service demand fluctuates in response to customer needs. However, despite these fluctuations, the laundry process maintains a well-defined structure and adheres to a specific protocol, allowing for mapping and analysis.

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