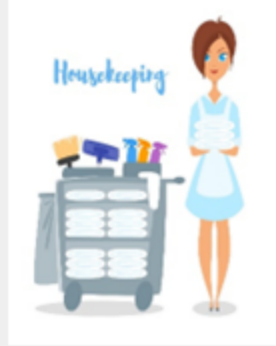


INTRODUCTION



Efficient housekeeping operations play a crucial role in maintaining cleanliness, hygiene, and overall customer satisfaction during transportation activities.



The study intends to explore the implementation of a porter system as a potential solution to improve housekeeping efficiency.



A porter service within a hospital is an integral indoor location-based management system. Porters play a vital role in facilitating hospital operations such as transportation of patients, medical equipment, etc.

AIM & OBJECTIVES

AIM

To implement a porter system and assess its effectiveness in improving housekeeping efficiency and service delivery within transportation environments.

OBJECTIVES

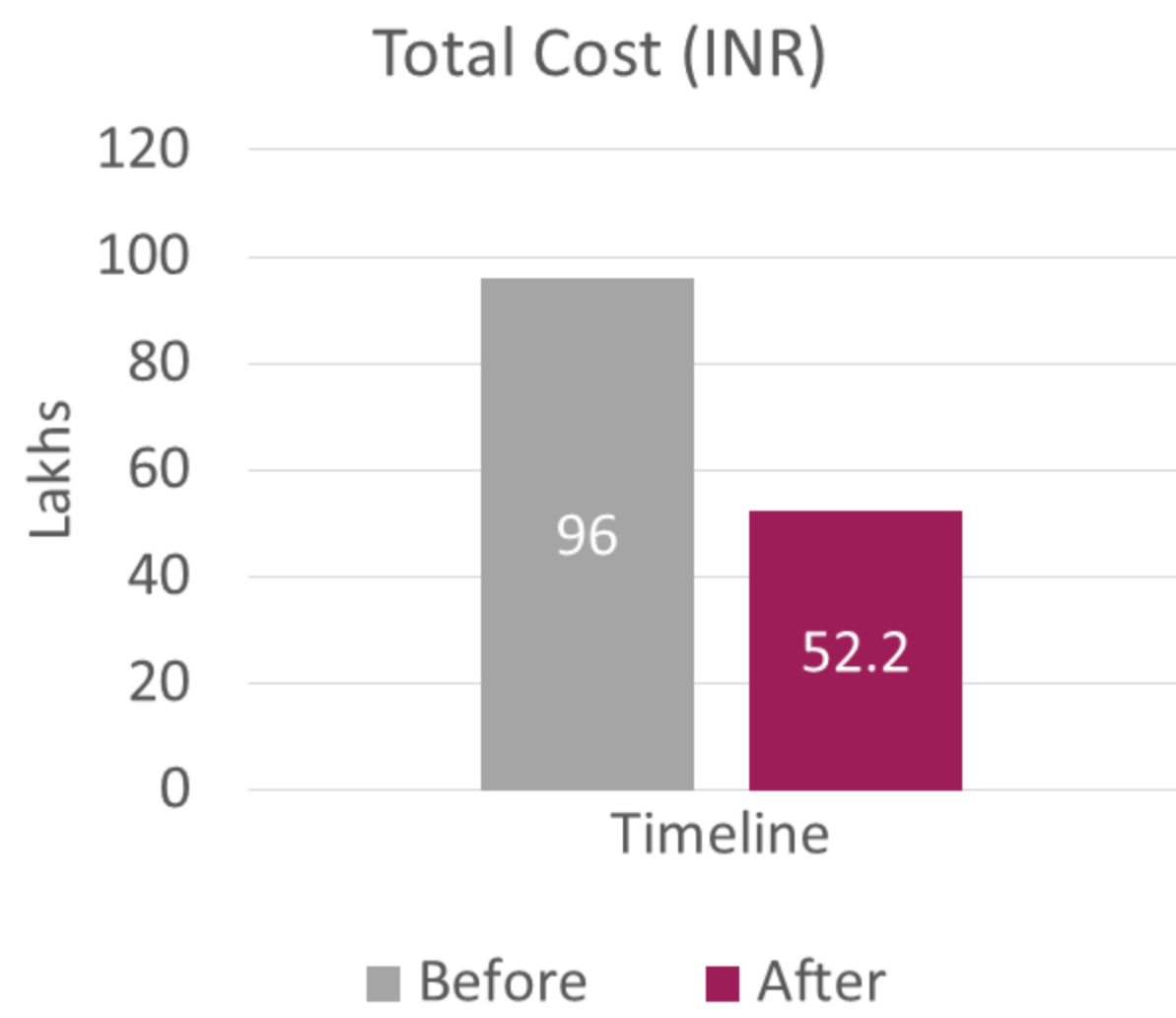
- To study the roles and responsibilities of the housekeeping staff
- To assess the challenges and effectiveness of housekeeping in any transportation
- To implement porter system and check its effectiveness

METHODOLOGY



- Primary data was collected by interviewing the housekeeping manager and supervisor to understand the roles and responsibilities, key challenges
- Secondary data was collected through patient satisfaction surveys and challenges such as manpower shortage were informed by supervisor
- The porter system and new app was implemented for a period of 9 months and assessed for effectiveness
- The app was evaluated by the number of manpower utilized for similar work and work satisfaction of the porters and patients
- The improvement was also accessed by departments heads
- The effectiveness of go porter system was recorded

RESULTS



Total Costs reduced from INR 98 Lakhs to INR 52.2 Lakhs after the implementation of the porter system (total costs reduced by 46%)

The go porter application is outsourced for a cost of around INR 35000 per month



The cost on manpower was reduced by ~50% (from INR 96 Lakhs now to INR 48 Lakhs)

	Before	After
Manpower	40 persons	20 persons
Porter Task Completion Time	45 min – 1 hr	18 – 21 mins

Manpower reduced from 40 to 20 (~50%) and porter task completion time reduced from 45mins-1hr to 18-21 mins after implementation of porter system

1 housekeeping staff was retained per department to perform basic work; house keeping staff were performing multiple jobs apart from job description



Interviews with nursing staff indicated their contentment, resulting from the absence of delays caused by the unavailability of housekeeping staff.

DISCUSSION



Go-Porter app optimally assigns jobs using Bluetooth beacons



Notable reduction in manpower and reduced workload of housekeeping staff



Allowed housekeeping staff to focus on core responsibilities improving operational efficiency



Streamlined processes and enhanced job satisfaction among staff



Proved to be cost effective and significantly reduced service time



Increased patient satisfaction due to separation of personnel doing housekeeping and transportation work

CONCLUSION

Study highlights optimizing housekeeping operations in transportation settings of a hospital

Understanding roles and challenges of housekeeping staff is important

Introduction of porter system has proven to be effective

Reduced manpower needed for transportation tasks, and increased satisfaction among porters and patients

Observed cost-effectiveness of new approach

Ongoing efforts needed to refine housekeeping operations for cleanliness, efficiency, and satisfaction

REFERENCES

- Lee, C. R., Chu, E. T., Shen, H., Hsu, J., & Wu, H. P. (2023). An indoor location-based hospital porter management system and trace analysis. *Health Informatics Journal*, 29(2). <https://doi.org/10.1177/14604582231183399>
- Ghaziabad, M. S. S. H. V. (2023, November 7). *Porter Management System- Digitalization of patient transport*. Executive DIALOG. <https://executivedialog.com/2023/11/07/porter-management-system-digitalization-of-patient-transport/>
- Ødegaard, F., Chen, L., Quee, R., & Puterman, M. L. (2007). Improving the efficiency of hospital porter Services, Part 1: Study Objectives and results. *Journal for Healthcare Quality*, 29(1), 4–11. <https://doi.org/10.1111/j.1945-1474.2007.tb00169.x>