

TITLE

Optimizing Wellness Package Utilization at Eternal Hospital, Jaipur: An Observational Study of Patient Adherence and Turnaround Time

INTRODUCTION AND BACKGROUND

Preventive healthcare is increasingly gaining recognition as a cornerstone of sustainable health systems, especially in urban India where lifestyle-related diseases are on the rise. Wellness packages—comprehensive health check-ups offered by tertiary care hospitals—serve as vital tools for early disease detection and long-term risk mitigation. These packages typically include a suite of diagnostic tests followed by specialist consultations. When utilized fully, they can enhance individual health outcomes and reduce the burden on curative services.

Eternal Hospital, a leading tertiary care institution in Jaipur, has developed a range of wellness packages tailored to various population segments, including executives, the elderly, and those at risk for metabolic disorders. These packages aim to promote preventive behavior and reduce undiagnosed conditions. However, internal audits and patient feedback suggest an operational challenge: many patients complete the diagnostic portion but fail to return for post-test consultations. This drop-off compromises the efficacy of the wellness model by disrupting the continuum of care.

Additionally, delays in service delivery—whether during registration, diagnostic procedures, or consultations—adversely affect patient satisfaction and increase the likelihood of incomplete engagement. According to De Wet and Botes (2014), prolonged waiting time is one of the primary reasons for dissatisfaction in outpatient services. In a time-sensitive health environment, optimizing turnaround time (TAT) is essential for both clinical effectiveness and operational efficiency.

To improve service design and enhance patient adherence, it is imperative to analyze the complete patient journey through the wellness package process. This study will provide empirical insights into time delays, patient characteristics, and service gaps that contribute to attrition, thereby informing actionable improvements in care delivery at Eternal Hospital.

STATEMENT OF THE PROBLEM

Although Eternal Hospital has witnessed a growing uptake of wellness packages, a significant proportion of patients do not complete the full continuum of care, particularly post-diagnostic consultations. Furthermore, inefficiencies in the process—such as long wait times and unclear patient communication—may be contributing to this partial adherence.

RATIONALE AND JUSTIFICATION

In an era that emphasizes value-based healthcare, incomplete utilization of wellness packages not only leads to suboptimal health outcomes but also wastes hospital resources and erodes patient trust. As supported by Solon et al. (2023), reducing turnaround time and improving coordination in primary care services are vital to enhancing patient experiences and clinical effectiveness. Similarly, Selvaraj and Aravind (2020) demonstrated that lean and time-motion strategies can significantly reduce delays and improve throughput in outpatient settings.

Given this context, the present study aims to evaluate the entire service pathway within Eternal Hospital's wellness package program, with an emphasis on adherence rates and turnaround time. The findings will help streamline operations and boost patient engagement in preventive health services.

RESEARCH QUESTION

What are the key factors influencing patient adherence and turnaround time in the utilization of wellness packages at Eternal Hospital, Jaipur?

OBJECTIVES OF THE STUDY

The study seeks to achieve the following **SMART** (Specific, Measurable, Achievable, Relevant, Time-bound) objectives:

1. **To measure the average turnaround time (TAT)** at each stage of the wellness package process (registration, diagnostics, consultation) over a two-month period.
 2. **To quantify the percentage of patients completing all components** of the wellness package, including the follow-up consultation.
 3. **To identify major service or communication barriers** that contribute to delays or drop-off from the process using structured patient observations.
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REVIEW OF LITERATURE

Improving efficiency in healthcare delivery—particularly through the reduction of turnaround time—has long been recognized as a strategy to enhance patient outcomes and satisfaction. Selvaraj and Aravind (2020) highlighted the effectiveness of lean methodologies and integrated

time-motion studies in reducing outpatient cycle time by 19% at Aravind Eye Hospital. Their work emphasized the importance of team coordination and structured patient flow as key contributors to efficiency.

Solon et al. (2023) examined consult turnaround time in a rural Philippine health system and found that improved communication, EMR usage, and provider accountability led to faster and more reliable care delivery. These findings underscore the relevance of system-level interventions in achieving healthcare efficiency.

De Wet and Botes (2014) also stress the psychological and operational impact of waiting time, revealing that longer patient cycles can lead to disengagement, decreased satisfaction, and missed follow-ups. Furthermore, their study in a South African outpatient clinic showed that even minor delays compound across service steps, significantly affecting the total time spent.

However, many existing studies are limited to specific departments or interventions and often lack a patient-centered view of the full service experience. This study aims to fill that gap by evaluating the entire pathway of a wellness package—from registration through to final consultation—within a tertiary care setting in India.

HYPOTHESES

H₀ (Null Hypothesis): There is no significant relationship between turnaround time and patient completion of the wellness package.

H₁ (Alternative Hypothesis): Longer turnaround times are significantly associated with reduced patient completion of the wellness package.

RESEARCH METHODOLOGY

Study Design:

Quantitative, observational study

Study Setting:

Eternal Hospital, Sanganer, Jaipur

Study Period:

March 10 to May 31, 2025

Study Population:

Patients availing wellness packages at Eternal Hospital during the study period

Inclusion Criteria:

- Adults (≥ 18 years) availing of any standard wellness package
- Take consent from all participants in the study.

Exclusion Criteria:

- Patients availing alternate preventive packages (e.g., Medi-Wheel)
- Patients unwilling to participate

Sampling Technique:

Convenience sampling of eligible patients presenting during the study period

Sample Size:

Approximately 100 patients, based on average daily patient footfall and feasibility

Data Collection Tools:

Structured observation checklist recording:

- Entry and exit times at each service station
- Completion of each service step (registration, diagnostics, consultation)
- Noted delays or cancellations

	DATE & TIME	UHID	Package Type	Sample Collection		ECG	X- RAY	USG	ECHO	TAT
				Blood	Urine					
FROM										
TO										
DUR.										
R.GEN.										

Data Analysis:

Data will be cleaned and coded in Microsoft Excel and analysed using Minitab 18.

- **Descriptive analysis** to summarize turnaround time and adherence rates
- **Inferential analysis** (e.g., chi-square test, Pearson correlation) to evaluate associations
- **Process flowcharts** and visual timelines will support interpretation

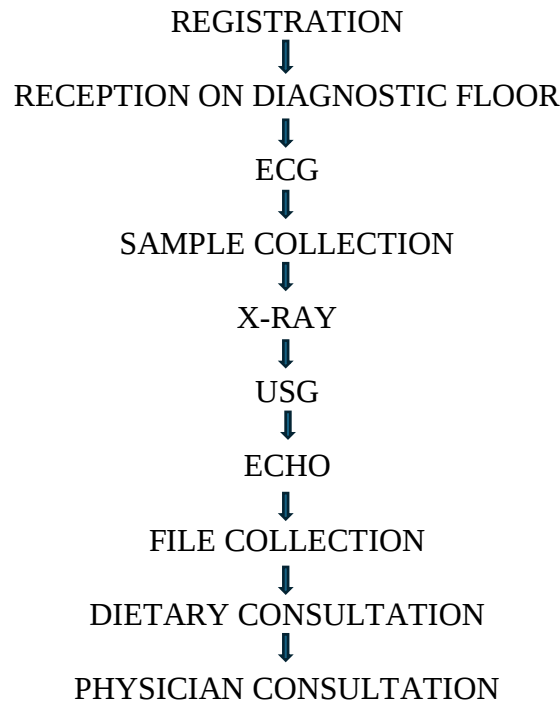
CONCEPTUAL FRAMEWORK

The study is anchored in Donabedian's Quality of Care Framework, which evaluates:

- **Structure:** Organizational setup and service availability

- **Process:** Steps in the delivery of care
- **Outcome:** Patient adherence and satisfaction

A schematic flowchart will visually map the patient journey through the wellness package.



ETHICAL CONSIDERATIONS

- Ethical approval will be sought from Eternal Hospital's Institutional Review Board.
- Informed consent will be obtained from all participants.
- Data confidentiality and anonymity will be strictly maintained.
- The study poses minimal risk as it involves no clinical intervention.

PATIENT BEHAVIOUR

- Patients who had visited previously showed higher adherence.
 - New patients often expected faster processes and were less likely to complete delayed steps.
 - Patients informed clearly at registration about sequence and approximate duration had better completion.
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EXPECTED OUTCOMES

- Empirical data on turnaround time and points of delay
- Quantified adherence/drop-out rate across the wellness service
- Practical recommendations for optimizing patient flow and increasing completion rates

Findings will inform improvements such as revised scheduling, digital reminders, improved communication, and potentially restructuring patient flow. These insights can serve as a model for other institutions offering preventive care services.

TIMELINE AND WORK PLAN

Phase	Duration	Activities
Literature Review & Tool Design	Mar 10 – Mar 20, 2025	Develop protocol, design observation checklists
Ethical Approval & Pretesting	Mar 21 – Mar 25, 2025	Obtain permissions, test tools
Data Collection	Mar 26 – May 15, 2025	Daily patient tracking and service time recording
Data Entry & Cleaning	May 16 – May 20, 2025	Data compilation, validation
Data Analysis & Interpretation	May 21 – May 25, 2025	Descriptive & inferential statistical analysis
Report Writing & Final Submission	May 26 – May 31, 2025	Drafting and submission of final dissertation

REFERENCES

- De Wet, C., & Botes, M. (2014). Impact of lean principles on patient waiting time in outpatient departments. *African Journal of Primary Health Care & Family Medicine*, 6(1), 1–6. <https://pubmed.ncbi.nlm.nih.gov/27543283>
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