



Utilization of Lab and Scan Services by Out-Patient Department Cases at Cloudnine: A Study

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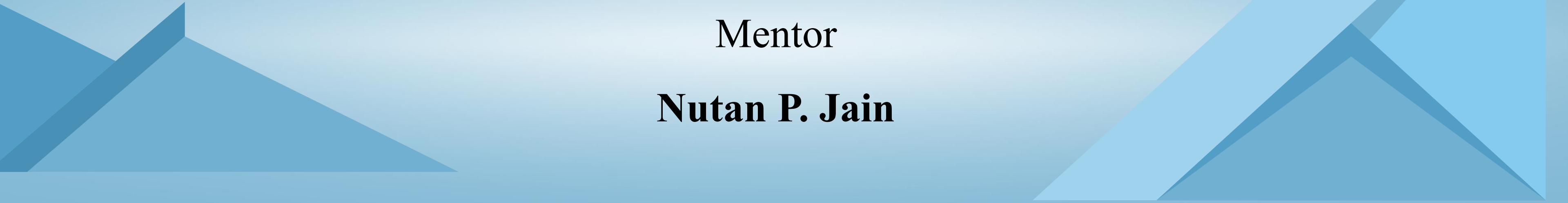
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Introduction

- The Outpatient Department (OPD) serves as the first and most frequent point of contact between patients and healthcare providers.
- OPDs play a crucial role in early diagnosis, treatment planning, and overall care management.
- Diagnostic services—such as laboratory tests and scans—are vital extensions of OPD care, enabling accurate and timely clinical decisions. Despite being recommended during OPD consultations, many patients do not complete their lab and scan in-house.
- This results in:
 - Missed opportunities for integrated care
 - Delayed diagnoses and fragmented treatment
 - Loss of hospital revenue and patient trust
- The study focuses on understanding the utilization gap in lab and scan services within OPD settings and identifying strategies to improve in-house diagnostic retention.

Research Questions

- Do patients discontinue or skip recommended in-house lab and scan services?
- If Yes, at what points in the outpatient care journey they do?
- What are the key factors influencing their decisions?

Objectives

- To study the out-patients who availed in-house lab and scan services at Cloudnine
- To examine the factors that influence beneficiaries decisions behind discontinuing/ skipping lab and scan services at the Cloudnine
- To suggest ways for increasing patient retention for in-house lab and scan services at Cloudnine.

Author (Year)	Sample Size	Study Duration	Sampling Techniques	Title of Study	Objectives	Salient Features
Patel et al. (2022)	1,000	8 months	Prospective observational	Effectiveness of Communication and Patient Navigation in Improving Diagnostic Retention	To evaluate how communication and patient navigation affect diagnostic retention in OPDs.	Clear communication and navigation support improved in-house diagnostic retention by 20%.
Sharma et al. (2021)	1,200	6 months	Multi-centre survey	Diagnostic Service Retention in Indian Metropolitan OPDs	To assess diagnostic retention rates and impact of external diagnostic options in metros.	Diagnostic leakage 25%–50%, higher in urban areas with multiple external diagnostic options.
Chandania et al. (2020)	600	4 months	Random sampling	Convenience Factors Influencing Diagnostic Service Choices	To investigate convenience factors influencing patient choice of diagnostic services.	Convenience (extended hours, home collection) major factor for choosing external labs.
Singh & Gupta (2019)	800	9 months	Cross-sectional survey	Impact of Cost and Pricing Models on Diagnostic Retention	To study how cost and pricing affect patient decisions on diagnostic services.	Lack of bundled pricing drives patients to external labs; bundled packages suggested as solution.
Verma et al. (2017)	700	5 months	Process mapping & observation	Operational Bottlenecks and Digital Solutions in Diagnostic Retention	To identify operational challenges and assess digital interventions on retention.	Scheduling delays and poor coordination identified; digital solutions improved retention by 15%.

Methodology

- A retrospective observational study was conducted over a four-week period (May 1-31, 2025) at Cloudnine Hospital, Bangalore.
- Sample: 180 OPD registrations who received recommendations for laboratory tests and scans

Department	Patients Recommended
Obstetrics	80
Gynaecology	60
Paediatrics	40

- Interaction with SIX staff
- Ethical Approval: Institutional Ethics Committee

Results: Retention & Leakage

Department	Patients Recommended	In-house Services	External Services
Obstetrics	80	45	35
Gynaecology	60	42	18
Paediatrics	40	18	22

Results: Retention & Leakage

- 180 cases recommended diagnostics.
- 105 cases (58%) completed their tests in-house at Cloudnine.
- 75 cases (42%) sought external diagnostic services.
- Leakage reflects missed opportunities for care and revenue.

Results: Reasons for Leakaging

- 30% – Perceived high cost at Cloudnine
- 25% – Convenience of external labs (hours, home collection)
- 20% – Long waiting times at hospital
- 15% – Unaware of in-house diagnostic services
- 10% – More trust in external providers

Factors Influencing Retention

- Cost: Perceived high charges at hospital labs.
- Convenience: External labs offer flexible hours, faster service, home collection.
- Trust: Preference towards known external providers.
- Communication: Lack of clear explanation from clinicians affects follow-through.
- Awareness: Cases unaware of available in-house services.

Literature-Supported Strategies

- Delays in diagnostic scheduling.
- Limited appointment slots.
- Cumbersome internal navigation for patients.
- Inadequate coordination between OPD and diagnostic units.
- No standardized follow-up with patients who defer diagnostics.

Conclusion

Cloudnine has high OPD footfall but suboptimal diagnostic conversion.

Patient leakage impacts care quality and financial sustainability.

Cost, access, communication, and process gaps drive leakage.

Targeted operational and communication strategies can boost retention.

Recommendations

- Communication and education through standardized counselling and informational materials during consultations need to be provided.
- Improving operational efficiency like digital scheduling, queue management systems, and streamlined test booking procedures can be done.
- Introducing pricing innovations such as bundled diagnostic packages, seasonal offers, and patient loyalty programs to reduce cost-related drop-offs.
- Implementing department-specific interventions, including follow-up protocols and patient navigation support, particularly in departments with higher leakage like Paediatrics.



Thank You