

# **ENHANCING PATIENT SATISFACTION THROUGH FEEDBACK MECHANISMS IN THE OPD**

Dissertation Submitted to



**The IIHMR University, Jaipur**

for the partial fulfillment for the award of the degree of

Master of Business Administration (MBA)

in

**Hospital and Health Management**

by

**Swarna Dipti**

Under the Supervision and Guidance of

**Dr. Ritu Vashistha**

**2025**



# ETERNAL HOSPITAL *Sanganer*



## Completion Certification

### CERTIFICATE

This is to certify that Swarna Dipti in partial fulfillment of the requirements for the award of the degree of MBA Hospital and Health Management from the IIHMR University, Jaipur has successfully completed her internship in Medical Administration at ETERNAL HOSPITAL SANGANER during Mar 10 - June 09, 2025.

Place: **JAIPUR**

Date: **9/6/25**



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## CERTIFICATE

This is to certify that dissertation titled **“Enhancing Patient Satisfaction Through Feedback Mechanisms in the OPD”** is the record of the research work undertaken by **Dr. Swarna Dipti** in partial fulfillment of the requirements for the award of the degree of M.B.A. **(Hospital and Health Management)** from the IIHMR University, Jaipur my guidance and supervision and her approach to the research study has been sincere, scientific and analytical.

A handwritten signature in blue ink, appearing to be 'Ritu Vashistha'.

Dr. Ritu Vashistha

Faculty guide

IIHMR University, Jaipur

Date: 18-june-25

A handwritten signature in blue ink, appearing to be 'Sanjay Gupta'.

Dr. Sanjay Gupta

Dean and Professor

IIHMR University, Jaipur

Date: 18-june-25

## DECLARATION BY STUDENT

I hereby declare that this dissertation titled **“Enhancing Patient Satisfaction Through Feedback Mechanisms in the Outpatient Department (OPD)”** is the Bonafide record of my original research work. I declare that it has not been submitted to any other university or institution for the award of any degree or diploma. Information derived from the published or unpublished work of others has been duly acknowledged in the text.

(Signature) *Swarna*

Name of Student: Swarna Dipti

Date: *12-06-25*

## Abstract

Patient satisfaction is an important part of healthcare quality, especially in outpatient departments (OPDs) where a large number of patients are seen every day and the time for one-on-one interaction is limited. This study was carried out in the OPD of Eternal Hospital, Sanganer, with the aim of improving patient satisfaction by using better feedback methods.

The main goals of the study were to find out how satisfied patients currently are, understand what factors affect their satisfaction, check how effective the existing feedback system is, try out new feedback methods, and finally, suggest ways to improve OPD services based on what patients shared.

To do this, we used a **prospective observational study design** for a period of **two months**. The study involved **200 patients**, selected using convenience sampling. Only patients aged 18 or above who were willing to give feedback were included. Emergency patients or those who couldn't understand the feedback form were not part of the study.

We used different tools to collect feedback: a paper-based form, an online feedback form accessed via a QR code, and a checklist to observe OPD service delivery. After their OPD visit, patients were asked to fill out the feedback form voluntarily. We made sure to take their consent before collecting any information.

The data collected each week was analyzed using simple statistics like average, percentages, and graphs to show patterns. For open-ended answers, we looked at common themes in what patients wrote.

From the feedback, we found that several things mattered to patients – such as waiting time, how staff behaved, how clearly doctors explained things, and how smoothly the overall process was. Many patients liked having different options to give feedback, especially the QR code survey which was easy and quick for them to use. Having these structured feedback tools made it easier to spot areas that needed improvement, such as reducing wait times or improving communication with patients.

The study followed all ethical rules. We got permission from the ethics committee, took informed consent from patients, and made sure their details remained confidential.

This research shows that collecting feedback in a proper and planned way really helps improve patient satisfaction. It's not just about collecting comments—it's about listening to what patients say and making real changes. This approach can be used in other hospitals too, helping them offer better care and a more comfortable experience for patients.

## **Results**

Out of 200 patients surveyed, 134 provided valid responses to the NPS question, resulting in a Net Promoter Score (NPS) of +50.74, indicating high patient loyalty. The overall Patient Satisfaction Index (PSI) was 84.5%, with nursing services scoring highest (87.0%) and diagnostics the lowest (80.3%). A total of 70 complaints were recorded, primarily related to diagnostic delays and front office inefficiencies. Subcategory analysis showed key issues in slip generation, billing, and report turnaround time. These findings highlight that while overall satisfaction is strong, targeted improvements are needed in diagnostic and administrative services to enhance patient experience.

**Keywords:** Patient satisfaction, feedback tools, outpatient care, hospital service improvement, quality healthcare NPS, PSI

## **ACKNOWLEDGEMENT**

The dissertation/internship project, helped in providing me with both, a learning experience as well as a glimpse into the daily managerial level issues of this renowned hospital. I was fortunate enough to interact with the esteemed authorities and staff of the hospital, who have encouraged and guided me with their support and patience.

First, I would like to thank providing me an opportunity to carry out my internship Eternal Hospital, Jaipur

I want to express my gratitude and sincere thanks to my mentor Dr Priyanka Maan, for her constant support and invaluable time-to-time guidance and kind of help in completion of this project. I would also like to extend my thanks to Mr Razi & Mr Jaimen for their guidance and cooperation.

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Finally, I acknowledge my indebtedness to the staff of the Hospital and my respected Guide of The IIHMR University Professor for providing his constant support by guiding me throughout my internship period.

I would also like to thank all those who have directly or indirectly supported me towards the completion of this Internship.

Sincerely,

Dr. Swarna Dipti

MBA-HM (2023-2025)

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## LIST OF ABBREVIATION

| Abbreviation | Full Form                      |
|--------------|--------------------------------|
| OPD          | Outpatient Department          |
| NPS          | Net Promoter Score             |
| PSI          | Patient Satisfaction Index     |
| IDTR         | Inter-Disciplinary Team Rounds |
| PWD          | Patient Welfare Department     |
| USG          | Ultrasonography                |
| TAT          | Turnaround Time                |
| QI           | Quality Improvement            |
| IPD          | Inpatient Department           |

# **DISSERTATION REPORT**

**“Enhancing Patient Satisfaction Through Feedback Mechanisms in the Outpatient Department (OPD)”**

# **CHAPTER 1**

## **INTRODUCTION**

## **CHAPTER 1: INTRODUCTION**

In today's information-driven world, patients are more aware of their health rights and the quality of care they should receive. They expect not just medical treatment but a respectful, well-organized, and satisfying experience. This shift in expectations has moved the focus of healthcare from merely increasing life span ("quantity of life") to enhancing the overall patient experience and well-being ("quality of life").

Although research on patient satisfaction gained momentum in the 1970s and 1980s, the concept has been around since the 1960s. It continues to play a key role in healthcare management today. A patient's perception of care can strongly influence their health outcomes. When patients are happy with the care they receive, they are more likely to follow treatment instructions. However, dissatisfaction can lead to poor cooperation and even negative word-of-mouth, which harms the hospital's reputation.

Patient satisfaction refers to how well the healthcare system meets a patient's expectations, needs, and personal goals. It is an essential factor in delivering high-quality and timely care. To earn patients' trust and loyalty, hospitals must prioritize patient-centered service.

The Outpatient Department (OPD) often serves as the first point of contact between patients and the hospital. It is seen as the hospital's front face or display window. Many people form opinions about the entire hospital based on their experience in the OPD. Due to the large number of patients and their attendants, OPDs can often become crowded and overwhelming. Poor queue management and service delays are common, leading to patient frustration and reduced satisfaction. That's why improving OPD operations is crucial.

Hospitals use tools like patient feedback forms to gather insights into patient experiences. These forms help identify what is working well and what areas need improvement, allowing hospital administrators to enhance service quality based on real patient input.

### **1.1 Operational Definitions**

#### **Patient Satisfaction**

The overall sense that a patient's healthcare needs are being effectively met. It strengthens the relationship between the patient and the doctor and can improve the patient's overall quality of life.

## Patient Feedback Form

A survey tool used to collect feedback from patients about their experience with the hospital, especially regarding specific departments such as the OPD.

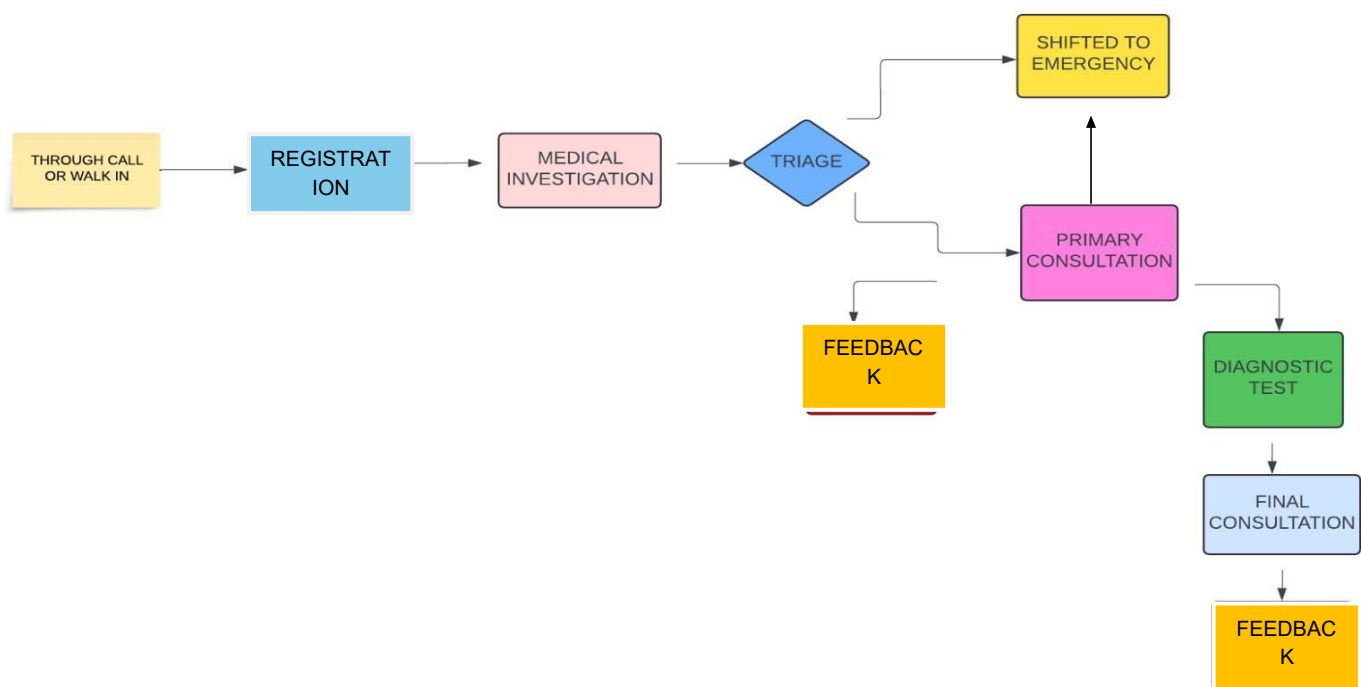
### 1.2 Importance of Patient Satisfaction

- A strong indicator of how loyal patients are to a hospital or healthcare provider.
- Encourages patients to return for future services, even if other options are cheaper.
- Satisfied patients are more likely to recommend the hospital to others.
- Loyal patients tend to try new services offered by the hospital more willingly.
- Retaining patients is far more cost-effective than acquiring new ones (6 to 7 times cheaper).
- High satisfaction reduces the spread of negative opinions.
- Feedback helps hospitals evaluate their service quality and identify problem areas.
- Data from feedback can be used for setting performance goals and benchmarking with competitors.
- Helps pinpoint gaps in service delivery and provides direction for improvement.

## OPD DEPARTMENT

The OPD (Outpatient Department) is where patients receive medical consultations without being admitted to the hospital. It is the first point of contact between the patient and the hospital.

### PROCESS FLOW OF OPD



## **Feedback Collection at Eternal Hospital: A Practical Approach**

Eternal Hospital, a tertiary care multi-specialty hospital, has developed a well-structured and technologically integrated system for feedback collection and complaint management. The hospital emphasizes patient engagement through multiple touchpoints and ensures that every concern is acknowledged and addressed in a timely manner.

The patient journey begins with a call or walk-in, followed by registration and a medical investigation. Based on the triage assessment, the patient may be released, sent for a primary consultation, or, if the case is critical, shifted to emergency. After the primary consultation, the patient might undergo diagnostic tests if further evaluation is needed. Once the tests are completed, a final consultation is conducted. The patient is then released with appropriate advice or treatment. After release, feedback is collected to assess service quality and improve the overall patient care experience.

### **The following methods are actively used at Eternal Hospital for collection of feedback**

#### **IDTR and PWD Rounds**

During Inter-Disciplinary Team Rounds (IDTR) and Patient Welfare Department (PWD) visits, designated staff personally interact with patients in wards. Patients are asked whether they have any feedback, complaints, or questions about their care. All concerns are documented and forwarded for resolution.

#### **Feedback Kiosks**

Digital kiosks placed within the hospital allow patients to submit feedback electronically. The system is linked with the hospital's Unified Hospital User Dashboard (UHUD), ensuring prompt notification to the concerned departments.

#### **Email Communication**

Patients can share suggestions or raise complaints via official hospital email. These emails are regularly monitored and responded to by the quality assurance or patient relations teams.

#### **Manual Feedback Forms**

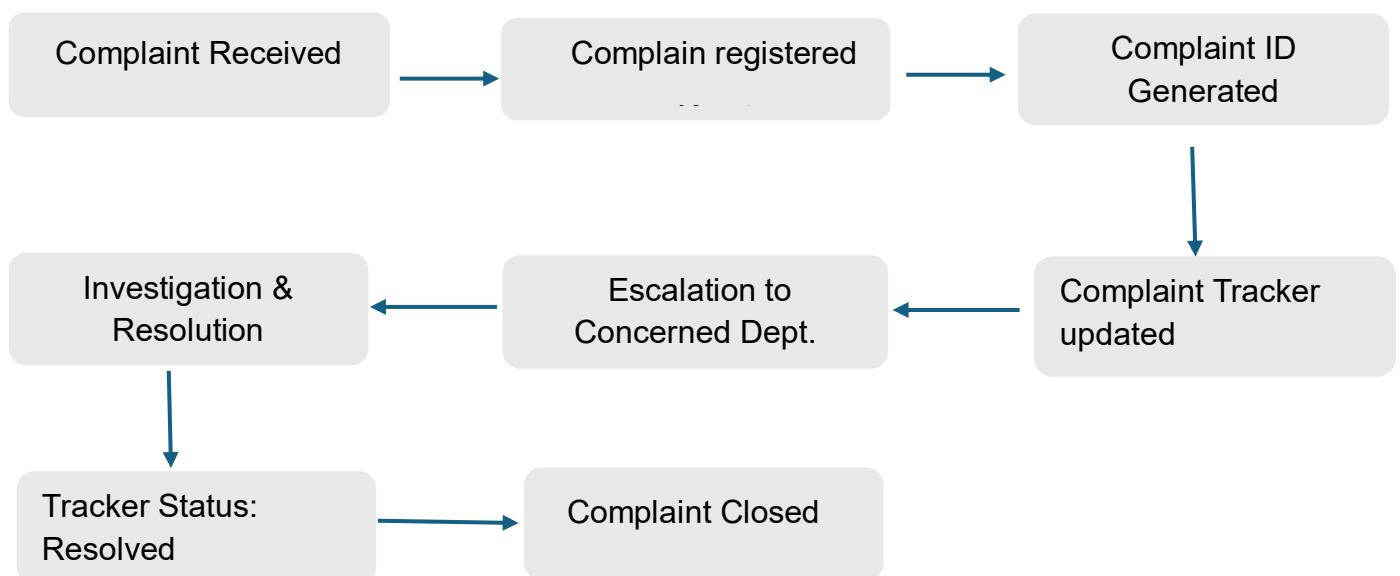
Paper-based forms are distributed in both OPD and IPD settings. These are collected daily, and relevant inputs are analyzed and acted upon accordingly.

## Google Reviews and On-call Complaints

External sources like Google Reviews and telephonic feedback are also considered part of the feedback ecosystem. These are treated with equal importance and responded to professionally.

### Complaint Redressal Mechanism

A complaint is received and immediately registered in the system. A unique complaint ID is generated for tracking purposes. The issue is then investigated thoroughly, and if necessary, escalated to the concerned department for quick resolution. Throughout the process, updates are recorded in the complaint tracker to ensure transparency. Once the issue is resolved, the complainant is informed, and the status is marked as "Resolved." After confirmation from the complainant or upon satisfactory resolution, the complaint is officially closed. This systematic approach ensures timely redressal, accountability, and improved service delivery, while maintaining clear records at every stage of the process.



## NPS (Net Promoter Score)

### Definition:

NPS is a tool used to measure how likely a person is to recommend a service, product, or organization to others. It's usually based on a single question: *"How likely are you to recommend us to a friend or colleague?"* The answer is given on a scale from 0 to 10.

### Importance:

NPS helps organizations understand overall customer or patient satisfaction and loyalty. A high score means people are happy with the service and willing to promote it, while a low score indicates problems that need attention. It gives a quick snapshot of public perception and helps improve services



## PSI (Patient Satisfaction Index)

### Definition:

PSI reflects how satisfied patients are with the care and services they received. It includes their experience with doctors, nurses, staff behaviour, cleanliness, waiting time, communication, and treatment outcomes.

### Importance:

PSI is crucial in healthcare because it shows how well the hospital or clinic is meeting patient needs. A higher PSI means better patient experiences, which often leads to improved trust, treatment outcomes, and reputation. It also helps hospitals identify areas that need improvement to provide safer, more respectful, and responsive care.

## **CHAPTER 2**

### **REVIEW OF LITERATURE**

| <b>Authors (Year)</b>                  | <b>Study Location</b>     | <b>Sample Size</b>           | <b>Sampling Technique</b>         | <b>Salient Features</b>                                                                     |
|----------------------------------------|---------------------------|------------------------------|-----------------------------------|---------------------------------------------------------------------------------------------|
| <b>Rao et al. (2006)</b>               | <b>India</b>              | <b>500 patients</b>          | <b>Random sampling</b>            | <b>Identified that structured patient feedback tools improve satisfaction and outcomes.</b> |
| <b>Al-Abri &amp; Al-Balushi (2014)</b> | <b>Oman</b>               | <b>6 hospitals</b>           | <b>Purposive sampling</b>         | <b>Emphasized real-time feedback's role in OPD service quality improvement.</b>             |
| <b>Ahmad et al. (2017)</b>             | <b>Pakistan</b>           | <b>400 OPD patients</b>      | <b>Convenience sampling</b>       | <b>Found correlation between feedback systems and waiting time management.</b>              |
| <b>Sharma et al. (2020)</b>            | <b>India</b>              | <b>10 tertiary hospitals</b> | <b>Stratified sampling</b>        | <b>Linked feedback to improved doctor-patient communication.</b>                            |
| <b>Khamis et al. (2015)</b>            | <b>Egypt</b>              | <b>350 patients</b>          | <b>Systematic random sampling</b> | <b>Feedback-led changes significantly improved patient satisfaction.</b>                    |
| <b>Shabbir et al. (2016)</b>           | <b>Pakistan</b>           | <b>300 OPD patients</b>      | <b>Simple random sampling</b>     | <b>Staff courtesy and responsiveness boosted through active feedback loops.</b>             |
| <b>Iliyasu et al. (2010)</b>           | <b>Nigeria</b>            | <b>600 OPD users</b>         | <b>Multistage sampling</b>        | <b>Patient feedback was essential in identifying provider gaps and improving services.</b>  |
| <b>Groene et al. (2013)</b>            | <b>Multi-country (EU)</b> | <b>1,200 patients</b>        | <b>Stratified sampling</b>        | <b>Patient-reported experience used for benchmarking OPD services across hospitals.</b>     |
| <b>Rashid et al. (2019)</b>            | <b>Bangladesh</b>         | <b>250 patients</b>          | <b>Convenience sampling</b>       | <b>Feedback tools improved clarity in communication and reduced patient anxiety.</b>        |

| <b>Authors (Year)</b>            | <b>Study Location</b> | <b>Sample Size</b>         | <b>Sampling Technique</b>         | <b>Salient Features</b>                                                               |
|----------------------------------|-----------------------|----------------------------|-----------------------------------|---------------------------------------------------------------------------------------|
| <b>Prasanna et al. (2009)</b>    | <b>India</b>          | <b>450 patients</b>        | <b>Purposive sampling</b>         | <b>Suggested regular collection and use of feedback for OPD quality assurance.</b>    |
| <b>Alasad &amp; Ahmad (2003)</b> | <b>Jordan</b>         | <b>200 outpatients</b>     | <b>Simple random sampling</b>     | <b>Effective patient feedback system improved interpersonal aspects of care.</b>      |
| <b>De Silva (2013)</b>           | <b>UK</b>             | <b>Review study (Meta)</b> | <b>Secondary data review</b>      | <b>Reinforced that feedback mechanisms empower patients and raise care standards.</b> |
| <b>Singh et al. (2018)</b>       | <b>India</b>          | <b>500 OPD patients</b>    | <b>Stratified random sampling</b> | <b>Real-time feedback improved patient flow and administrative efficiency.</b>        |
| <b>Musa et al. (2011)</b>        | <b>Malaysia</b>       | <b>320 patients</b>        | <b>Systematic sampling</b>        | <b>Found that continuous feedback promotes better physician responsiveness.</b>       |
| <b>Khalid et al. (2021)</b>      | <b>Saudi Arabia</b>   | <b>5 hospitals</b>         | <b>Purposive sampling</b>         | <b>Highlighted role of electronic feedback in enhancing OPD service delivery.</b>     |
| <b>Zarei et al. (2012)</b>       | <b>Iran</b>           | <b>420 OPD patients</b>    | <b>Simple random sampling</b>     | <b>Emphasized feedback in improving diagnostic accuracy and patient trust.</b>        |
| <b>Nair et al. (2016)</b>        | <b>India</b>          | <b>300 patients</b>        | <b>Convenience sampling</b>       | <b>Showed strong association between feedback and waiting area improvements.</b>      |
| <b>Okoli et al. (2020)</b>       | <b>Nigeria</b>        | <b>250 OPD patients</b>    | <b>Cluster sampling</b>           | <b>Feedback identified bottlenecks in consultation timing and registration.</b>       |

| <b>Authors (Year)</b>            | <b>Study Location</b> | <b>Sample Size</b>   | <b>Sampling Technique</b>  | <b>Salient Features</b>                                                              |
|----------------------------------|-----------------------|----------------------|----------------------------|--------------------------------------------------------------------------------------|
| <b>Deshmukh et al. (2014)</b>    | <b>India</b>          | <b>600 OPD users</b> | <b>Stratified sampling</b> | <b>Patient satisfaction scores improved through structured feedback assessments.</b> |
| <b>Abdulrahman et al. (2022)</b> | <b>UAE</b>            | <b>400 patients</b>  | <b>Random sampling</b>     | <b>Digital feedback tools accelerated service upgrades and complaint resolution.</b> |

## **CHAPTER 3**

### **METHODOLOGY**

### 3.1 Research Question

How can Net Promoter Score (NPS), Patient Satisfaction Index (PSI), and complaint rates be employed to conduct a gap analysis for identifying deficiencies in outpatient department (OPD) services and improving overall patient satisfaction in a tertiary care hospital.

### 3.2 Study Design

A cross-sectional observational study was conducted to assess the impact of structured feedback tools on patient satisfaction in the OPD setting.

### 3.3 Study Population

Patients visiting the Outpatient Department (OPD) at Eternal Hospital, Sanganer, Jaipur.

#### 3.3.1 Inclusion Criteria

- Patients aged 18 years and above
- Patients who gave informed consent to participate in the feedback process
- Patients attending the OPD during the study period

#### 3.3.2 Exclusion Criteria

- Emergency or critically ill patients
- Patients with cognitive or communication impairments
- Patients unwilling to participate

### 3.4 Sample Size

200 patients

### 3.5 Data Collection Tool

#### **Feedback Collection Method**

Manual feedback collection was done using structured forms that measured both **Net Promoter Score (NPS)** and **Patient Satisfaction Index (PSI)**.

#### **1. Net Promoter Score (NPS):**

- Patients were asked: “On a scale of 1–10, how likely are you to recommend this hospital to others?”

- NPS was calculated using the standard formula:

$$\text{NPS} = \% \text{ Promoters (9–10)} - \% \text{ Detractors (1–6)}$$

## **2. Patient Satisfaction Index (PSI):**

- PSI was calculated across various departments using a 1–5 scale:
  - 1: Very Dissatisfied
  - 2: Dissatisfied
  - 3: Neutral
  - 4: Satisfied
  - 5: Very Satisfied
- PSI was calculated as an average score per department.

### **Departments Covered for PSI Scoring:**

- **Front Office (Registration, Billing, Staff Behaviour)**
- **Doctors' Consultation**
- **Nursing Services**
- **Diagnostics (e.g., Lab, X-ray)**
- **Pharmacy**
- **Cafeteria**
- **Parking & Security**

### **3.6 Data Collection Procedure**

- Feedback was obtained post-consultation in the waiting or exit area
- Trained staff guided patients to fill out the form or scan the QR code
- Data was collected daily and compiled weekly
- Suggestion box entries were reviewed biweekly for qualitative analysis

## **Operational Definitions:**

Patient Satisfaction: The level of contentment expressed by patients about their experience in the OPD.

Feedback Mechanism: Tools used to gather patient opinions and experiences about healthcare services.

### **3.7 Data Analysis Plan**

- **Descriptive statistics**: Mean, frequency, and percentage for each department's PSI (1–5 scale).
- **Department-wise PSI**: Average scores calculated to compare satisfaction across Front Office, Doctors, Nurses, Diagnostics, Pharmacy, Cafeteria, Parking & Security.
- **NPS Calculation**:
  - Promoters (9–10), Passives (7–8), Detractors (1–6)
  - $\text{NPS} = \% \text{ Promoters} - \% \text{ Detractors}$
- **Thematic analysis**: Categorize open-ended responses into common themes like waiting time, staff behavior, and communication.
- **Visualization**: Use bar charts for PSI, pie charts for NPS, and tables to present key findings clearly.

Patient's Name: .....UHID: ..... Treating Doctor: .....  
 Date of Visit: ..... Contact No: ..... E-mail: .....

**RATE YOUR EXPERIENCE WITH US** The Feedback Has Been Filled By/ फीड बैक किसके द्वारा भरा गया ☐ Patient / मरीज  
☐ Attendant / कीर्तक

| Your Experience About<br>आपका अनुभव                |                                                                                                                                           | Excellent<br>सर्वोत्तम | Very Good<br>बहुत अच्छा | Good<br>अच्छा | Fair<br>ठीक-ठाक | Poor<br>खराब |
|----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------------------|---------------|-----------------|--------------|
| Overall Hospital Visit<br>संपूर्ण अस्पताल का अनुभव | Overall quality of healthcare service provided by the hospital<br>अस्पताल द्वारा प्रदान की जाने वाली स्वास्थ्य सेवाओं की संपूर्ण गुणवत्ता |                        |                         |               |                 |              |
| Front Office<br>फ्रंट ऑफिस                         | Politeness, Courtesy and attitude<br>विनम्रता शिष्टाचार और रवैया                                                                          |                        |                         |               |                 |              |
|                                                    | Waiting time to generate the bill<br>बिल जारी होने में प्रतीक्षा समय                                                                      |                        |                         |               |                 |              |
|                                                    | Response to your queries/आपके प्रश्नों के उत्तर                                                                                           |                        |                         |               |                 |              |
| Doctor<br>डॉक्टर                                   | Waiting time for consultation<br>परामर्श के लिए प्रतीक्षा समय                                                                             |                        |                         |               |                 |              |
|                                                    | Time spent in doctor consultation<br>डॉक्टर के परामर्श में समय बिताया                                                                     |                        |                         |               |                 |              |
|                                                    | Information about the treatment<br>उपचार के बारे में जानकारी                                                                              |                        |                         |               |                 |              |
| Nursing<br>नर्सिंग                                 | Vital Taken by nurse/नर्स द्वारा महत्वपूर्ण नब्ब लिया गया                                                                                 |                        |                         |               |                 |              |
|                                                    | Pain Screening management/दर्द स्क्रीनिंग एवं प्रबंधन                                                                                     |                        |                         |               |                 |              |
|                                                    | Provided Fall education & Information<br>गिरने से संबंधित शिक्षा और सूचना                                                                 |                        |                         |               |                 |              |
| Diagnostics<br>हाथनॉस्टिक                          | Skills of sample collection staff<br>सैंपल लेने में कर्मचारियों की कुशलता                                                                 |                        |                         |               |                 |              |
|                                                    | Information & timeliness of report delivery<br>सूचना और रिपोर्ट वितरण की समयबद्धता                                                        |                        |                         |               |                 |              |
|                                                    | Relevant consent taken for radiological procedure<br>रिडियोलॉजिकल प्रक्रिया के लिए प्रासंगिक सहमति पत्र लिया                              |                        |                         |               |                 |              |
| Pharmacy<br>फार्मसी                                | Availability of prescribed medication<br>निर्धारित दवा की उपलब्धता                                                                        |                        |                         |               |                 |              |
|                                                    | Education about dispensed medication<br>वितरित दवा के बारे में शिक्षा                                                                     |                        |                         |               |                 |              |
|                                                    | Waiting Time to get prescribed medications/<br>निर्धारित दवाओं को प्राप्त करने के लिए प्रतीक्षा समय                                       |                        |                         |               |                 |              |
| Cafeteria/Food<br>कैंफेटेरिया/भोजन                 | Quality of Food/भोजन की गुणवत्ता                                                                                                          |                        |                         |               |                 |              |
|                                                    | Cleanliness and hygiene/ स्वच्छता                                                                                                         |                        |                         |               |                 |              |
| Parking & Security<br>पार्किंग और सुरक्षा          | Car parking facilities/ कार पार्किंग सुविधायें                                                                                            |                        |                         |               |                 |              |
|                                                    | Politeness and courtesy of security guard<br>सुरक्षा कर्मचारी की विनम्रता और शिष्टाचार                                                    |                        |                         |               |                 |              |

**Please Rate - How likely is it that you would recommend EHS to a friend or family?**

कृपया बतायें कि आप अपने परिवार एवं दोस्तों को ई.एच.सी.सी. भेजने के लिये कितना मूल्यांकित करेंगे।

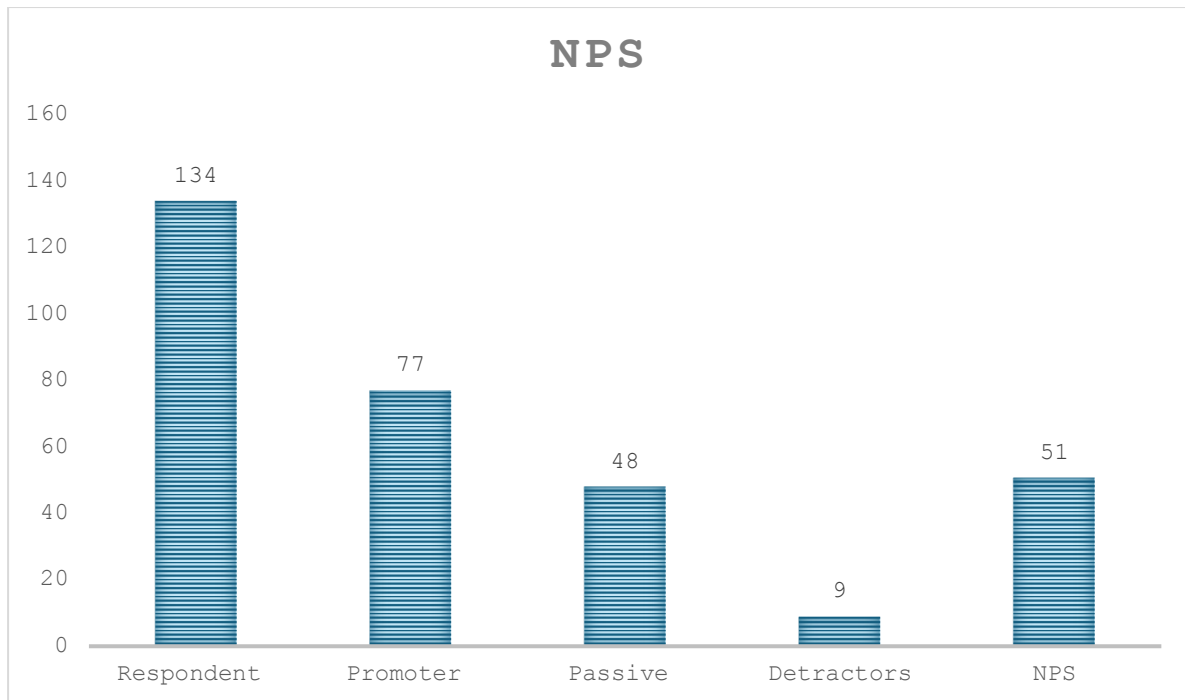
0 1 2 3 4 5 6 7 8 9 10

**Comments & Suggestions/ टिप्पणी और सुझाव**

**Person whose's services impressed you the most / वो व्यक्ति जिसकी सेवाओं ने आपको सबसे अधिक प्रभावित किया है।**

## **CHAPTER 4**

### **RESULT**



Out of a total of 200 patients surveyed, complete feedback was obtained from all participants. However, only 134 respondents provided a valid response to the Net Promoter Score (NPS) question. Based on these responses, the hospital achieved an NPS of 50.74.

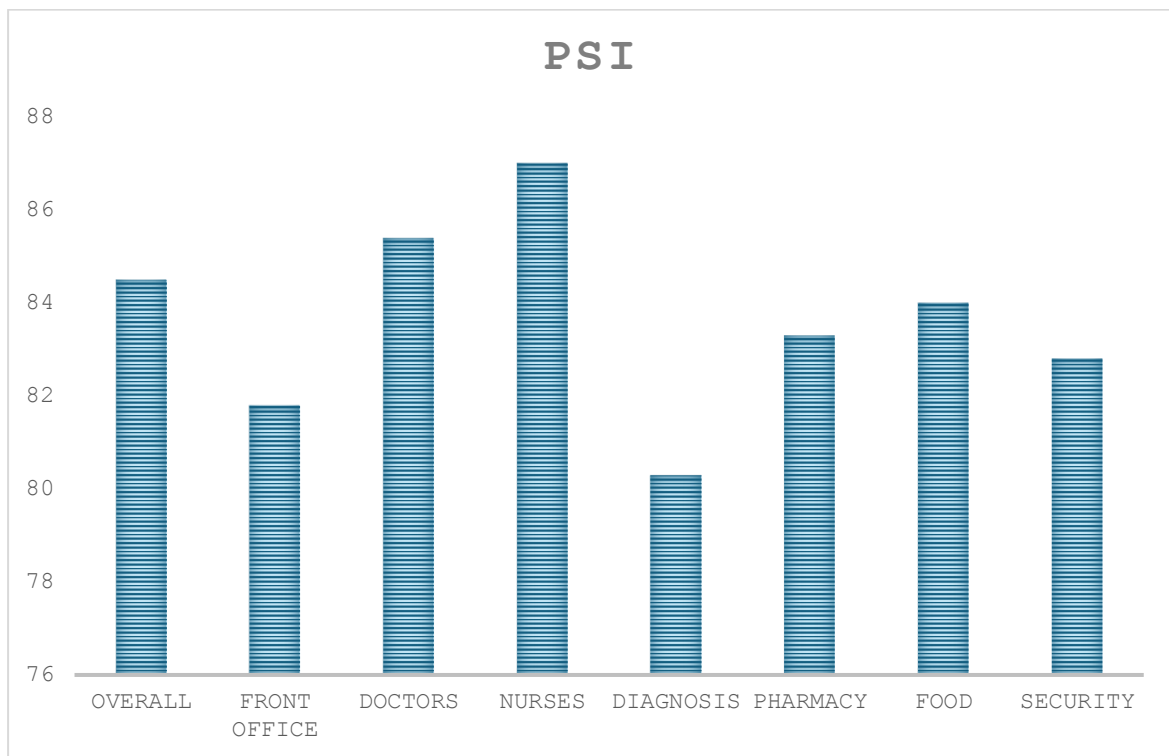
Breakdown of the 134 valid responses:

- 77 respondents (57.46%) were Promoters
- 48 respondents (35.82%) were Passives
- 9 respondents (6.72%) were Detractors

Calculated NPS:

$$\text{NPS} = 57.46\% - 6.72\% = 50.75\%$$

The NPS score reflects a favorable level of patient satisfaction and loyalty. While the majority of patients are likely to recommend the hospital, the presence of Detractors indicates scope for targeted improvements in certain service areas.



PATIENT SATISFACTION INDEX (PSI)

| Department    | PSI Score |
|---------------|-----------|
| Overall       | 84.5      |
| Front Office  | 81.8      |
| Doctors       | 85.4      |
| Nurses        | 87.0      |
| Diagnostics   | 80.3      |
| Pharmacy      | 83.3      |
| Food Services | 84.0      |
| Security      | 82.8      |

$$\text{PSI (\%)} = (\text{Maximum Possible Score} / \text{Total Score Obtained}) \times 100$$

Among all departments, **nursing services received the highest PSI score (87.0%)**, indicating strong patient trust and satisfaction with nursing care. Conversely, the **diagnostics department recorded the lowest score (80.3%)**, suggesting potential areas for improvement in diagnostic services and patient interaction.

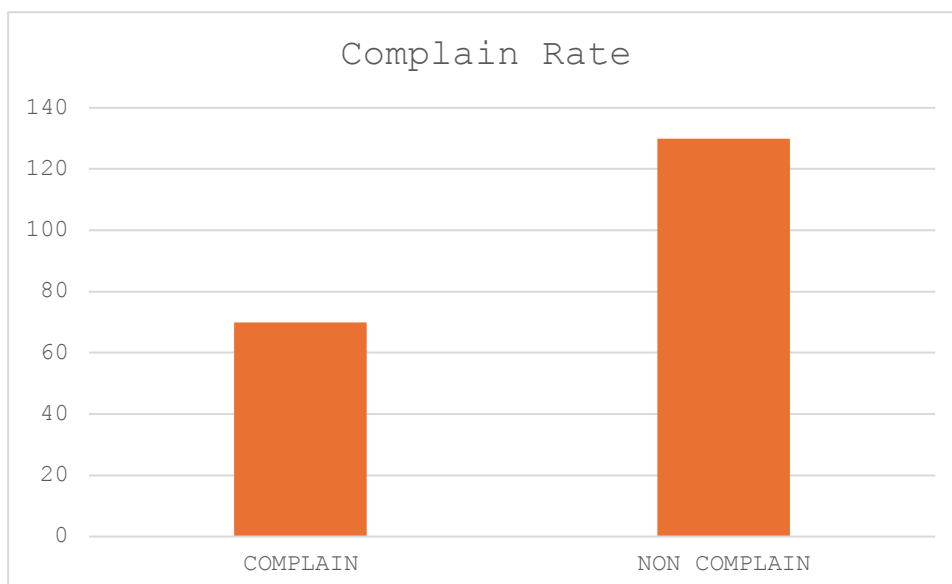
The overall PSI of **84.5%** reflects a **positive perception of hospital services**. However, the variation across departments highlights the importance of targeted quality improvement initiatives to ensure consistent patient satisfaction.

### complaint rate analysis

Total number of patients surveyed: **200**

Number of patients who registered complaints: **70**

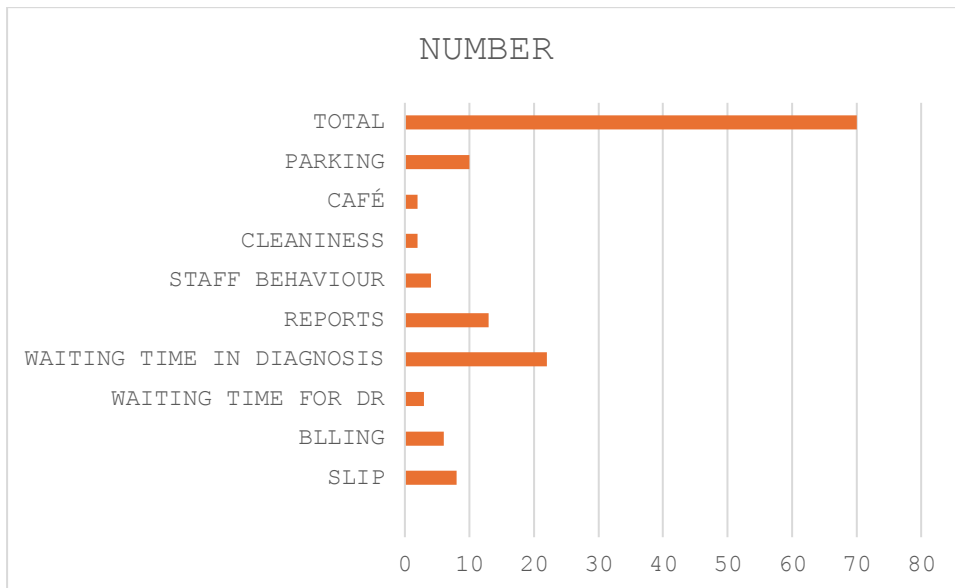
Number of patients with no complaints: **130**



### Patient Complaint Summary

A total of **70 complaints** were recorded from 200 patients during the study period. The breakdown of complaints by issue type is given in the table below:

| Complaint Category        | Number of Complaints |
|---------------------------|----------------------|
| Slip Generation           | 8                    |
| Billing                   | 6                    |
| Waiting Time for Doctor   | 3                    |
| Waiting Time in Diagnosis | 22                   |
| Report Delays             | 13                   |
| Staff Behaviour           | 4                    |
| Cleanliness               | 2                    |
| Café Services             | 2                    |
| Parking                   | 10                   |



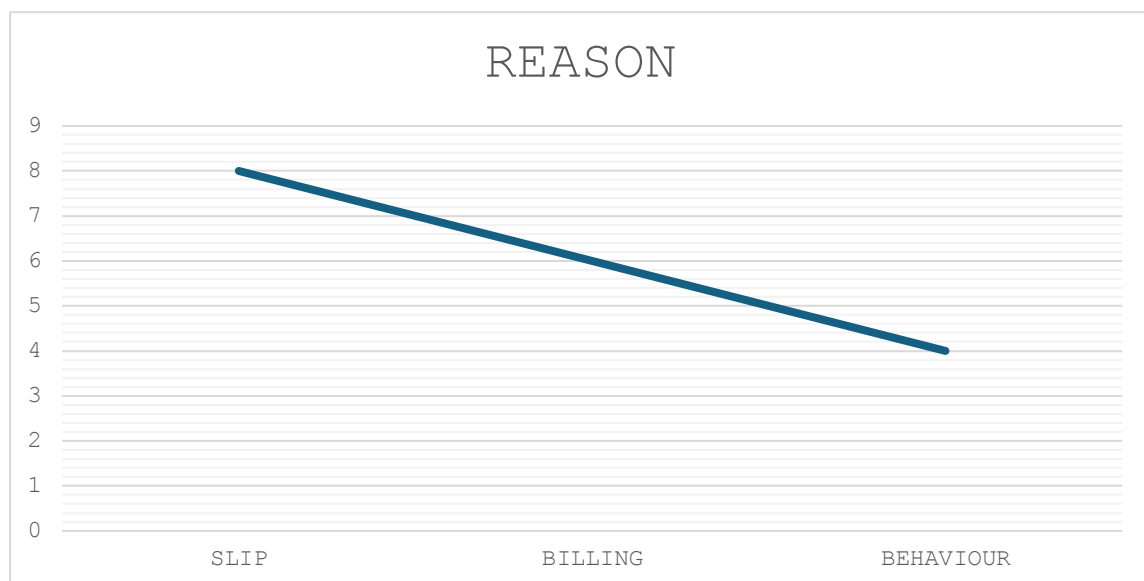
### Results: Subcategory Analysis of Front Office PSI

To identify specific areas contributing to the lower Patient Satisfaction Index (PSI) in the **Front Office department (81.8%)**, out of 70 complain 18 is related to front office the feedback was further categorized into three key areas: **Slip generation, Billing process, and Staff Behaviour**. The number of concerns recorded under each subcategory were as follows:

- **Slip-related issues: 8**
- **Billing-related issues: 6**
- **Staff Behaviour-related issues: 4**

This breakdown suggests that **slip generation** is the most frequently reported issue within the front office, followed by billing delays and staff behaviour concerns. These insights indicate that administrative delays and communication gaps during registration may be key factors affecting overall patient experience in the front office.

This subcategory analysis supports the initial PSI findings and provides a **clear direction for department-specific quality improvement** efforts to enhance overall satisfaction in the front office area.



### **Results: Subcategory Analysis of Diagnosis Department PSI**

To identify specific areas contributing to the lower Patient Satisfaction Index (PSI) in the **diagnostic department (80.3%)**, out of 70 complain 35 is related diagnosis the feedback

was further categorized into two key areas: **waiting time in diagnosis and delays in reports**

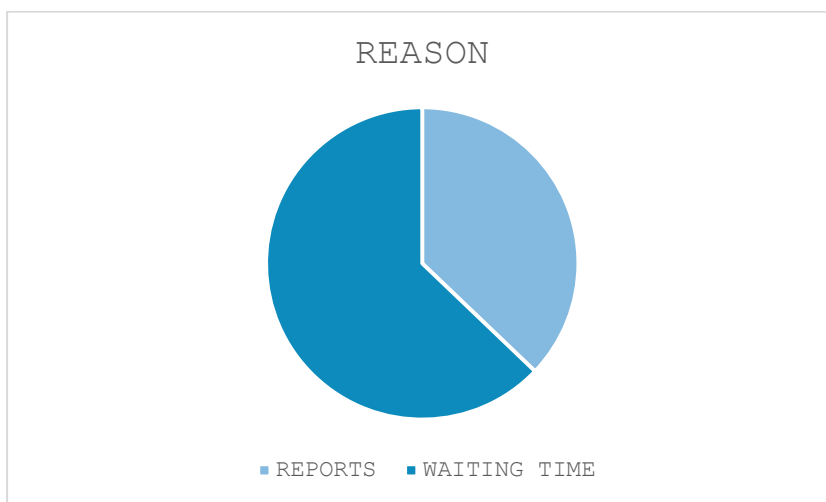
The number of concerns recorded under each subcategory were as follows:

**Issue within Diagnosis      Number of Complaints**

Waiting Time in Diagnosis 22

Delay in Reports                      13

**Total                                      35**



**Subdivision of Complaints by Diagnostic Procedure**

**Diagnostic Procedure      Number of Complaints**

USG                                      6

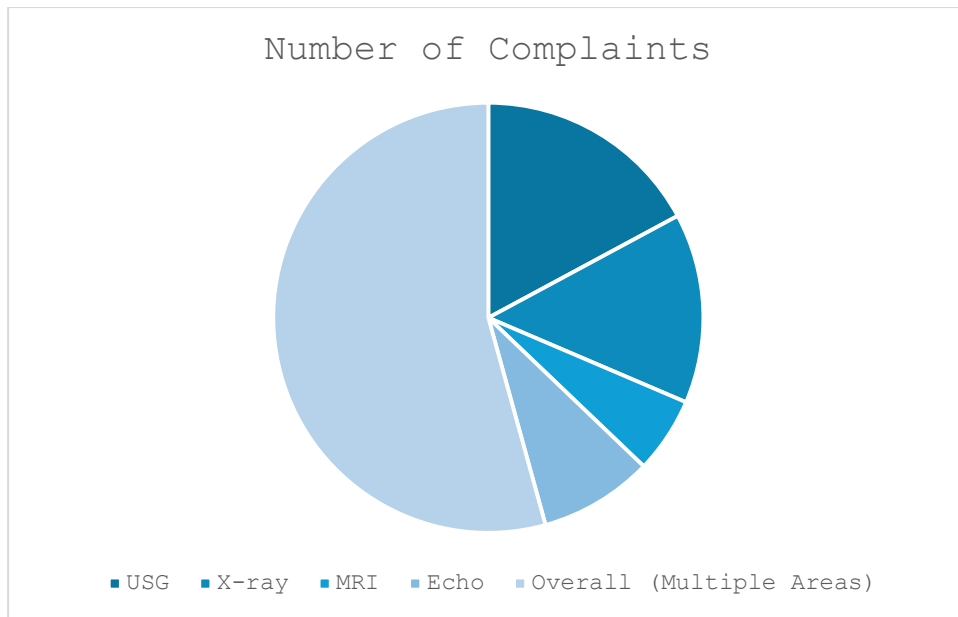
X-ray                                    5

MRI                                      2

Echo                                     3

Overall (Multiple Areas) 19

**Total                                    35**



The majority of diagnostic complaints (over 54%) fall under the **"Overall/Multiple Areas"** category, suggesting **system-wide issues** such as **delays, poor coordination, or unclear communication**. Among specific modalities, **USG and X-ray** had the highest number of individual complaints, pointing to the need for **process improvement, scheduling efficiency, or staff behaviour training** in these areas.

## **CHAPTER 5**

### **DISCUSSION**

This study provides critical insights into patient satisfaction across various hospital departments using structured feedback tools such as the Net Promoter Score (NPS), Patient Satisfaction Index (PSI), and complaint rate analysis. The comprehensive data reflects the multifaceted nature of patient experiences and highlights both strengths and areas requiring targeted improvement.

The Net Promoter Score (NPS) of +50.74, derived from 134 valid responses out of 200 surveyed patients, indicates a strong level of patient loyalty and satisfaction. With 57.46% of patients categorized as Promoters, it is evident that a majority are willing to recommend the hospital to others. However, the 6.72% Detractor rate suggests that a segment of patients experienced dissatisfaction during their care journey. These negative experiences, although limited, cannot be overlooked, as they can significantly impact the hospital's reputation and word-of-mouth referrals. The presence of 35.82% Passives indicates neutral experiences, which also present opportunities for converting them into Promoters through service enhancements.

The overall Patient Satisfaction Index (PSI) score of 84.5% reflects a generally positive perception of hospital services. However, the breakdown across departments reveals meaningful variations. Nursing services (87.0%) received the highest PSI score, indicating a high level of patient trust and appreciation for the care and attentiveness provided by nursing staff. Similarly, doctors (85.4%) and food services (84.0%) performed well, suggesting effective clinical care and hospitality services. These high scores point to well-functioning interpersonal aspects of patient care.

Conversely, diagnostic services (80.3%) and front office operations (81.8%) were identified as weaker areas. Subcategory analysis of diagnostic complaints revealed 22 instances of prolonged waiting time and 13 related to report delays, indicating inefficiencies in scheduling and reporting workflows. Furthermore, when diagnostic complaints were categorized by procedure, USG (6), X-ray (5), and Echo (3) emerged as frequent sources of dissatisfaction. Additionally, 19 complaints were generalized across diagnostic services, suggesting systemic challenges rather than isolated issues.

The front office department similarly showed lower patient satisfaction. Out of the 70 total complaints, 18 were linked to front office services, with slip generation (8 complaints), billing issues (6), and staff behaviour (4) emerging as the main concerns. This suggests administrative inefficiencies and communication barriers during registration and billing processes. These findings align with the lower PSI score and highlight the need for staff training, better queue management, and clearer communication protocols to improve the patient's first point of contact with the hospital.

The complaint rate of 35% (70 out of 200 patients) is a notable finding, underscoring the value of complaint analysis as a quality improvement tool. While not all dissatisfaction leads to formal complaints, those that are registered provide valuable direction for service enhancement.

In summary, while the hospital shows overall strong patient satisfaction levels, there are clear opportunities for improvement in diagnostics and front office areas. Targeted interventions, staff sensitization, process automation, and continuous feedback loops can help in addressing patient concerns more effectively and enhancing the overall patient experience.

## **CHAPTER 6**

## **CONCLUSION**

## CONCLUSION

The study underscores that while the hospital demonstrates commendable performance in overall patient satisfaction—evidenced by a robust PSI of 84.5% and a notably high NPS of +50.74—the granular analysis exposes critical departmental disparities that cannot be overlooked. Exceptional ratings in nursing care and medical services reflect the hospital's commitment to clinical excellence and patient-centric care. However, significant operational inefficiencies in the diagnostic and front office areas—particularly related to extended waiting periods, report turnaround delays, and administrative redundancies—signal urgent need for process optimization.

The fact that 35% of patients raised concerns clearly emphasizes the necessity of adopting a more proactive and structured approach to feedback management. It is not merely an operational metric, but a call for institutional introspection and responsive action.

To elevate patient experience from 'satisfactory' to 'exceptional,' the hospital must invest in enhanced communication protocols, real-time monitoring systems, and streamlined interdepartmental coordination. Implementing targeted, department-specific action plans and fostering a culture of continuous improvement will be key to not only sustaining high patient satisfaction but also to positioning the hospital as a benchmark in quality care delivery.

## **CHAPTER 7**

### **RECOMMENDATION**

## RECOMMENDATIONS

### FRONT OFFICE IMPROVEMENT (Slip Generation & Billing)

#### Single-Window Digital Registration Kiosk:

- Install a touch-screen kiosk where patients can complete **Akhil + RGHS registration + slip generation** in one go.
- Use QR codes or Aadhaar-linked prefilled data to reduce manual entry.

#### Checklist Posters at Registration:

- Display simple **step-by-step guides** (with visuals) in local language + English near the registration counter.

#### Unified Digital Dashboard:

- Integrate Akhil and RGHS data onto one interface for staff use to **track real-time registration status**.

#### Auto-token Generation at Billing:

- Once slip is generated, auto-generate a billing token to **avoid separate queueing**.

### DIAGNOSTIC DEPARTMENT (Delays in XRAY USG, Echo, Reports)

#### Doctor Coordination Alert System:

- Add a **notification system** to alert doctors when a USG/Echo is pending due to their presence.
- Use WhatsApp/SMS/Call to reduce idle time.

#### Real-Time Report Status Display:

- Set up **TV screens or patient portals** that show live test/report status (e.g., “Sample taken”, “Under review”, “Report ready”).

#### Daily Report Audit Tracker:

- Implement a simple Excel or software tool to track **report TATs** and highlight delays beyond 2 hours.

## **COMMUNICATION & PATIENT HANDLING**

### **Patient Information Leaflets:**

- Simple printed flyers about:
  - Test procedures
  - Waiting times
  - How to download reports online

### **Soft Skill Staff Huddles** (10 min daily):

- Conduct **daily morning stand-up meetings** with front office + diagnostic staff for updates, empathy reminders, and handling difficult patients.

## REFERENCES

Kanal, E., Barkovich, A. J., Bell, C., Borgstede, J. P., Bradley, W. G., Froelich, J. W., ... & Zaremba, L. A. (2007). ACR guidance document for safe MR practices: 2007. *American Journal of Roentgenology*, 188(6), 1447-1474.

Shellock, F. G., & Spinazzi, A. (2008). MRI safety update 2008: Part 1, MRI contrast agents and nephrogenic systemic fibrosis. *American Journal of Roentgenology*, 191(4), 1129-1139.

Darweesh, A. A., Youssef, M. F., & Zaki, S. M. (2020). MRI safety compliance and associated incident analysis in radiology departments. *The Egyptian Journal of Radiology and Nuclear Medicine*, 51(1), 1-6

arghese, B., Nair, R., & Thomas, M. (2022). Validation of CAHO PREM tools in diagnostic imaging: A South India experience. *Journal of Clinical Imaging Science*, 12(1), 44