

CUSTOMER RELATIONSHIP MANAGEMENT AT APOLLOMEDICS SUPER SPECIALTY HOSPITALS, LUCKNOW: A STUDY

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

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Under the Supervision and Guidance of

Dr. Nutan P. Jain

2025



30th May, 2025

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Mr. Anubhav Singh** is working with us since **18th Mar, 2025** in the **Group Revenue Team** department at **Apollomedics Super Speciality Hospitals, Lucknow.**

His performance during this period is up to the required standards.

Yours sincerely,
for Apollomedics SUPER SPECIALITY HOSPITALS,
[a venture of Apollomedics International Lifesciences Limited & an AHIL Group Hospital]

()

Mr. Deepak Sachdeva
Deputy General Manager
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CERTIFICATE

This is to certify that dissertation titled **Customer Relationship Management at Apollomedics Super Specialty Hospitals, Lucknow: A Study** is a record work undertaken by **Anubhav Singh** in partial fulfillment of the requirements for the award of the degree of **MBA (Hospital and Health Management)** from the IIHMR University, Jaipur under my guidance and supervision and his approach to the research study has been sincere, scientific, and analytical.

A handwritten signature in blue ink, appearing to read 'Nutan'.

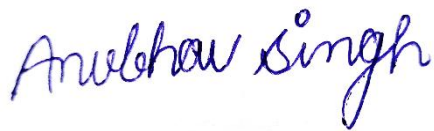
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DECLARATION BY STUDENT

I hereby declare that this Dissertation titled Customer Relationship Management at Apollomedics Hospitals, Lucknow: A Study 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 Information derived from the published or unpublished work of others has been duly acknowledged in the text.



Name of Student- Anubhav Singh

Date: 04/07/2025

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Regards,

Anubhav Singh

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LIST OF ABBREVIATIONS

Abbreviation	Full Form
CRM	Customer Relationship Management
OPD	Out-Patient Department
SOP	Standard Operating Procedure
SMS	Short Message Service
EMR	Electronic Medical record

ABSTRACT

HM 28 Customer Relationship Management at Apollomedics Hospitals, Lucknow: A Study

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Advisor: Dr. Nutan P. Jain

Keywords:

Customer Relationship Management, Patient Satisfaction, Service Delivery, Outpatient Department, Hospital CRM, Apollomedics, Health Management, OPD Feedback.

Introduction

Customer Relationship Management is increasingly used in hospitals to enhance patient satisfaction and streamline service delivery. At Apollomedics Super Specialty Hospitals, Lucknow, CRM supports outpatient care by improving registration, communication, and patient engagement.

Objectives:

The objectives are threefold: (i) to review the customer relationship management policy, guidelines, strategies and processes at Apollomedics Hospital; (ii) to study the role of CRM in OPD service delivery at Apollomedics Hospital; and (iii) to identify enabling and hindering factors contributing to CRM implementation.

Methodology

The study is descriptive in nature. A review of the customer relationship management policy, guidelines, strategies and processes at Apollomedics Hospital focusing on out-patient services was done to understand the need of the CRM at the hospital services related to OPD, CRM processes, and role of the CRM team members. CRM Process mapping of OPD patient journey (very first step to the last steps) was done. A survey was conducted with the patients registered during March–May 2025. Data were collected from 80 OPD patients through a structured questionnaire covering CRM domains such as appointment booking, registration, staff interaction, and communication. Descriptive statistics were used for analysis and visualization.

Results

The study participants were both men (56%) and women. Nearly one-fourth of the patients fall in each age group of the young adults (18-25 years) and adults (26-35 years). About 35 per cent cases fall in 36-50 age group followed by 18 percent were above the age of 50 years. Average age of the respondents was found to be 36-37 years. The results reveal overall satisfaction with CRM dimensions was shown by 64% respondents. The results indicate that the highest satisfaction was observed with 'Registration Quickness', as 71% of patients responded in affirmative, followed by cleanliness (66%), Staff Courtesy, Cleanliness and Appointment Booking (61% each).

Conclusion

CRM has improved OPD service efficiency at Apollomedics Hospital. While operational aspects like appointment and registration were rated positively, communication gaps need improvement. Better integration and CRM-based follow-ups are recommended to enhance patient experience.

Chapter 1: Introduction

1.1 Background

Customer Relationship Management (CRM) refers to a strategic system integrating people, processes, and technology to enhance the quality of patient interactions, engagement, and loyalty. In the context of healthcare, especially private hospitals like Apollomedics Super Specialty Hospitals, CRM is implemented to improve patient satisfaction, streamline service delivery, and establish lasting patient-provider relationships.

Hospitals operate in a highly competitive environment where patient expectations are increasing, and loyalty is influenced by service efficiency and personalized communication. CRM systems offer a solution by maintaining detailed patient histories, automating appointment processes, managing feedback, and providing analytical insights to improve service quality.

With increasing pressure on outpatient departments (OPDs) due to growing patient volumes, CRM acts as a tool to reduce bottlenecks and ensure a patient-centered experience. This study was undertaken to assess CRM processes at Apollomedics Hospital and evaluate their role in OPD service delivery and patient satisfaction.

This creates a critical disconnect: the existence of CRM systems does not always guarantee better service outcomes unless effectively implemented and patient-focused. In the case of Apollomedics Hospital, although CRM tools are in place, there is limited evaluative research to determine whether they are meeting patient expectations in real-time OPD service environments.

1.2 Context of the Study

Apollomedics Super Specialty Hospitals, Lucknow, is a tertiary care facility serving a large and diverse outpatient population. With the increasing use of technology in healthcare, the hospital has implemented a Customer Relationship Management (CRM) system to streamline OPD operations such as appointment scheduling, registration, and patient communication.

Given the volume of patients and the demand for efficient service delivery, this study was conducted to assess how effectively CRM is applied in the hospital's OPD and how it influences patient satisfaction and operational efficiency.

1.3 Significance of the Study

With growing competition in the healthcare sector, especially among private hospitals, service differentiation has become essential. Patients today expect not only accurate diagnosis and treatment but also a smooth, responsive, and well-communicated care experience. In this environment, CRM systems play a pivotal role in improving service efficiency and strengthening the patient-provider relationship. This study is significant for the following reasons:

- It provides empirical insights into the functioning of CRM systems in a high-volume OPD setting.
- It helps identify gaps between CRM design and execution, highlighting areas for strategic improvement.

- The findings will assist hospital administrators in optimizing service workflows and staff training through CRM usage.
- It contributes to the limited body of literature on CRM application in Indian super specialty hospitals, particularly in Tier-2 cities like Lucknow.
- It supports the hospital's broader goals of patient-centered care, operational excellence, and continuous quality improvement.

1.4 Objectives of the Study

The objectives of the study are:

- To review the customer relationship management policy, guidelines, strategies and processes at Apollomedics Hospital
- To study the role of CRM in OPD service delivery at Apollomedics Hospital.
- To identify enabling and hindering factors contributing to CRM implementation

Chapter 2: Review of Literature

Title of the study & Year	Author(s)	Objectives	Methodology (Location, Sampling Sample size, etc)	Key Results	Reference/ URL/Website
Effectiveness Of Customer Relationship Management In Healthcare Industry: A Study In Coimbatore (2025)	Gunaseelaprabhu & Umamaheswaran	To evaluate the effectiveness of CRM in the healthcare industry in Coimbatore	Location: Coimbatore, India Sampling: Not specified Sample Size: Not specified	CRM practices have a significant impact on patient satisfaction and loyalty.	Metallurgical and Materials Engineering. 2025 May 7:823-33
Customer relationship management in healthcare: strategies for adoption in a public health system (2024)	Sharma VK, Sharma V, Kumar D	To explore strategies for CRM adoption in public healthcare systems	Location: India Sampling: Not specified Sample Size: Not specified	CRM adoption is influenced by internal readiness and perceived benefits; strategies must align with organizational capabilities.	Journal of Marketing Theory and Practice. 2024 Sep 1:1–26
The Influence of Service Quality, Customer Relationship Management (CRM), and Image on Patient Satisfaction and Service Marketing Performance at a Type B Private Hospital in Makassar (2024)	Amuddin M, Damis H	To analyze the effect of service quality, CRM, and image on patient satisfaction and marketing performance	Location: Makassar, Indonesia Sampling: Not specified Sample Size: Not specified	CRM and service quality positively influence patient satisfaction and service marketing performance.	Revista de Gestão Social e Ambiental. 2024;18(7):1–20

Title of the study & Year	Author(s)	Objectives	Methodology (Location, Sampling Sample size, etc)	Key Results	Reference/ URL/Website
Customer relationship management and patient satisfaction and loyalty in selected hospitals in Ghana (2021)	Abekah-Nkrumah G, Yaa Antwi M, Braimah SM, Ofori CG	To examine CRM practices and their influence on patient satisfaction and loyalty	Location: Ghana Sampling: Stratified random sampling Sample Size: 800 patients	CRM significantly impacts patient satisfaction and loyalty in Ghanaian hospitals.	Int J Pharm Healthc Mark. 2021 Jun 9;15(2):251–68
Healthcare facilities website and their impact on customer satisfaction from the perspective of CRM (2019)	Budiman A, Bačík R, Fedorko R, Ivanková V, Turáková A, Kovaľová E	To examine how hospital websites influence customer satisfaction from a CRM perspective	Location: Not specified Sampling: Not specified Sample Size: Not specified	Effective websites enhance CRM outcomes and improve patient satisfaction.	Polish Journal of Management Studies. 2019;19
The impact of CRM on organizational productivity, customer trust and satisfaction using SEM: A study in Iranian hospitals (2017)	Yaghoubi M, Asgari H, Javadi M	To assess CRM's impact on productivity, trust, and satisfaction using SEM	Location: Iran Sampling: Stratified sampling Sample Size: 384 hospital clients	CRM positively affects productivity, trust, and satisfaction in hospitals.	J Educ Health Promot. 2017 Jan 1;6(1):6
Examining the patient's satisfaction from Hospital Service Quality using the CRM Model (2015)	Hosseini MH, Meymand MM, Heidarvand S	To evaluate hospital service quality and its relation to CRM-based patient satisfaction	Location: Iran Sampling: Not specified Sample Size: Not specified	CRM improves patient perceptions of service quality and satisfaction.	J Entrep Bus Econ. 2015 Dec 30;3(2):16–40

Title of the study & Year	Author(s)	Objectives	Methodology (Location, Sampling Sample size, etc)	Key Results	Reference/ URL/Website
The relationship between CRM usage, customer satisfaction, and revenue (2015)	Simmons RL	To investigate the relationship between CRM usage and performance outcomes	Location: USA Sampling: Not specified Sample Size: Not specified	CRM usage correlates positively with customer satisfaction and hospital revenue.	Walden University Dissertation, 2015
The effect of CRM on Customer Satisfaction with Health Facilities in Tanzania (2015)	Chigwala J	To analyze CRM's effect on satisfaction in Tanzanian health facilities	Location: Tanzania Sampling: Not specified Sample Size: Not specified	CRM has a strong positive effect on patient satisfaction.	Doctoral Dissertation, Open University of Tanzania
Evaluating customer relationship dynamics in healthcare sector through indoor patients' judgement (2011)	Chahal H, Kumari N	To study patient perceptions on CRM and service quality	Location: India Sampling: Not specified Sample Size: Not specified	CRM influences indoor patient satisfaction and perception of service quality.	Management Research Review. 2011 May 24;34(6):626–48

Chapter 3: Methodology

The study is descriptive in nature. The study following steps were taken to conduct the study:

Study area: Apollomedics Super Specialty Hospitals, Lucknow

Duration of Study: March -May2025

Step 1: Review of CRM Policy, Guidelines, and Strategies

To understand how CRM operates within outpatient services at Apollomedics, the following documents were reviewed:

Policy Documents:

- Customer Relationship Management Policy
- OPD Registration and Appointment Management Policy
- CRM-based Communication Policy
- CRM Feedback and Complaint Handling Policy
- Patient Privacy and Data Security Policy

These policy documents defined the hospital's stance on patient engagement, data confidentiality, feedback mechanisms, and use of CRM tools.

Guidelines:

- Appointment Booking Protocols via CRM
- OPD Registration and Data Entry Guidelines
- CRM Follow-Up and Reminder Protocols
- Complaint and Grievance Redressal Guidelines
- Feedback Collection SOP

These guidelines outlined step-by-step procedures for appointment handling, front-desk CRM usage, automated communication, and service feedback processing.

Strategy documents:

- Digital Strategy for OPD Management
- Multi-channel Patient Engagement Strategy
- CRM Analytics and Dashboard Utilization Strategy
- Patient-Centered CRM Optimization Plan
- CRM Training and Staff Onboarding Strategy

These strategic documents highlighted the hospital's plans to integrate CRM across departments, enhance service efficiency, and use data-driven dashboards for quality improvement.

Step 2: CRM Process mapping of OPD patient journey (very first step to the last steps). A typical process was mapped and shown in flow diagram.

Step 3: Planning, designing, conducting and analysing a short patient satisfaction (with 18 years above patients who have visited within the three months March-April 2025 period, and were not employees of the hospital) online survey.

Approximately 1100 patients registered for OPD services during March-April 2025, and sample was taken at the rate of 10%, that means 110 patients. Keeping in view the e survey will be sent on the mobile of the patients; there were chances that some phone numbers may not be correct or not accessible. Therefore, 4% means 40 patients were included in the sample, which makes 150 patients. A total of 80 patients (53%) responded to the survey only.

3.1 A structured questionnaire was developed using Google Forms, consisting of information like demographic information, and items related to OPD service quality (staff, behaviour, wait time, hygiene, appointment system, and communication)

3.2 A list of patients attended during the last three months period was developed and the online survey was sent to 150 patients only.

3.3 The review was analysed on the thematic areas of the CRM emerging from the documents.

3.4 The e survey data was analysed using descriptive statistics. Each CRM service component was analysed based on patient ratings from 1 to 5, allowing the identification of strengths and gaps in service delivery.

3.5 Refer to the results, a discussion was held with the CRM team members to find the hindering factors.

Ethical Considerations

- Verbal and written consent was obtained from all respondents for maintaining Ethical transparency, Clarity for participants, Formal record-keeping.
- No personal identifiers were collected.
- Institutional permission was secured from Apollomedics administration.
- Data was used exclusively for academic purposes and kept confidential.
- All data were stored on password-protected systems and accessible only to the researcher and supervisor.

Chapter 4: Results

The results included the key points of the documents reviewed like Customer Relationship Policy, Guidelines, and Strategies.

CRM Policy at Apollomedics Hospital

Apollomedics has adopted a formal CRM policy that emphasizes:

1. Timely and efficient patient engagement throughout the outpatient journey.
2. Digital registration and appointment scheduling to reduce manual dependency.
3. Automated communication, including reminders, follow-ups, and patient alerts.
4. Feedback collection and grievance redressal through structured, CRM-enabled platforms.
5. Confidential handling of patient information, maintaining privacy in all CRM interactions.

CRM Guidelines (Outpatient Services)

To implement the policy, the hospital has laid down specific guidelines for OPD services, including:

- All first-time and follow-up appointments must be logged through the CRM interface.
- Front-desk teams are instructed to use the CRM system to confirm visits, update patient demographics, and direct flow to relevant departments.
- SMS/email reminders are auto-triggered by the CRM system to inform patients about their upcoming visits, test reports, and any service delays.
- Feedback mechanisms are integrated within the CRM portal and are mandatory for specific departments to review weekly.
- Patient queries or service-related complaints must be resolved and recorded within the CRM system.

CRM Strategies in the OPD Setting

The hospital's CRM strategy for outpatient care focuses on:

1. Patient-Centric Communication
Ensuring regular, clear, and personalized communication via CRM tools.
2. Operational Efficiency
Using CRM data to manage appointments, reduce wait times, and monitor service bottlenecks.
3. Experience Monitoring and Feedback
Leveraging real-time feedback to improve service quality and staff responsiveness.

4. Data-Driven Service Planning

CRM dashboards help clinical and non-clinical managers make informed decisions based on patient trends.

CRM Process in Outpatient Services

a. Appointment Booking

- Patients can book appointments online through the hospital portal, via telephone, or walk-in.
- CRM software automatically schedules the appointment in real-time and assigns slots based on doctor availability.
- A confirmation message is sent via SMS and/or email using CRM-integrated communication tools.

b. Patient Registration

- On arrival, patients are greeted at the front desk, where their details are entered or retrieved through the CRM system.
- New patients are given a unique hospital identification number.
- Returning patients' visit history is fetched through CRM to enable faster processing.

c. Queue and Department Management

- After registration, the CRM system guides the patient flow by:
 - Logging check-in times
 - Assigning the appropriate consultation department
 - Displaying queue positions on digital displays (if available)
- The system helps manage overlapping or delayed appointments to minimize waiting times.

d. Clinical Consultation Support

- Doctors access the patient's basic visit information and history via CRM-linked dashboards.
- Any future review dates or additional diagnostics are entered into the CRM system for follow-up.

e. Feedback Collection

- Post-consultation, CRM triggers patient feedback forms via:
 - SMS with a feedback link

- Tablets/kiosks placed near exit counters
- Patients rate their experience on various CRM-related dimensions (e.g., waiting time, staff behaviour, communication).

f. Follow-Up and Reminders

CRM automatically sends

- Review visit reminders
- Diagnostic test result updates
- Billing and report collection notices
- Patients are kept informed using scheduled notifications via SMS or WhatsApp.

g. Complaint Handling and Grievance Resolution

If a complaint is registered by a patient (during or post-visit), it is:

- Logged into the CRM
- Tagged to the appropriate department or escalation officer
- Tracked until resolution, with system-generated alerts to ensure timely response

h. Data Analytics and Performance Review

The CRM dashboard compiles:

- Daily footfall reports
- Average waiting times
- Feedback scores and trends
- These analytics are shared with management for monthly service performance review meetings.

i. Staff Training and Usage Monitoring

- Staff are trained regularly to update CRM entries accurately and timely.
- Usage logs help identify:
 - Gaps in CRM compliance
 - Staff who need additional technical training

j. CRM Implementation Processes

The CRM processes are as follows:

A. Appointment Booking and Scheduling

- Appointments are handled through a centralized CRM interface, where front-desk staff schedule patient visits based on doctor availability.
- Online appointment bookings are routed directly into the CRM, allowing for real-time slot confirmation.
- Patients receive SMS confirmations, although delays occur during peak hours due to high traffic.

B. Registration and Patient Onboarding

- On arrival, patient registration is conducted using CRM-linked terminals.
- Returning patients have their profiles retrieved automatically, minimizing re-entry of data.
- However, manual backups are sometimes used when the system lags, leading to inconsistencies.

C. Queue Management

- Once registered, patients are routed to waiting areas, and their sequence is monitored via CRM timestamps.
- Although time of check-in is recorded, live queue updates are not always displayed, causing uncertainty for patients about wait durations.

D. Clinical Consultation Coordination

- Doctors access patient files, visit history, and pending appointments using CRM-integrated software.
- The system helps doctors schedule follow-ups, but integration with lab and pharmacy is only partial.

E. Communication with Patients

- CRM automatically sends appointment reminders, test alerts, and post-visit messages.
- During field observation, it was noted that some patients do not receive messages due to phone number mismatches or network delays.

- Multilingual support is not yet fully developed in the system, limiting communication with non-English/Hindi-speaking patients.

F. Feedback Mechanism

- Feedback is collected using tablet-based digital forms or via mobile links post-visit.
- However, not all patients are guided to complete feedback, especially during high OPD rush, resulting in underutilized data.

G. Follow-Up Scheduling

- Follow-up visits are logged into the CRM during consultation.
- Reminders are automated, but not all patients return on scheduled dates, indicating a gap in engagement or trust.

H. Complaint Handling and Resolution

- Complaints logged at the front desk are entered into the CRM and escalated to the service quality team.
- Though a CRM log is maintained, response timelines vary, and not all grievances are acknowledged within 24 hours.

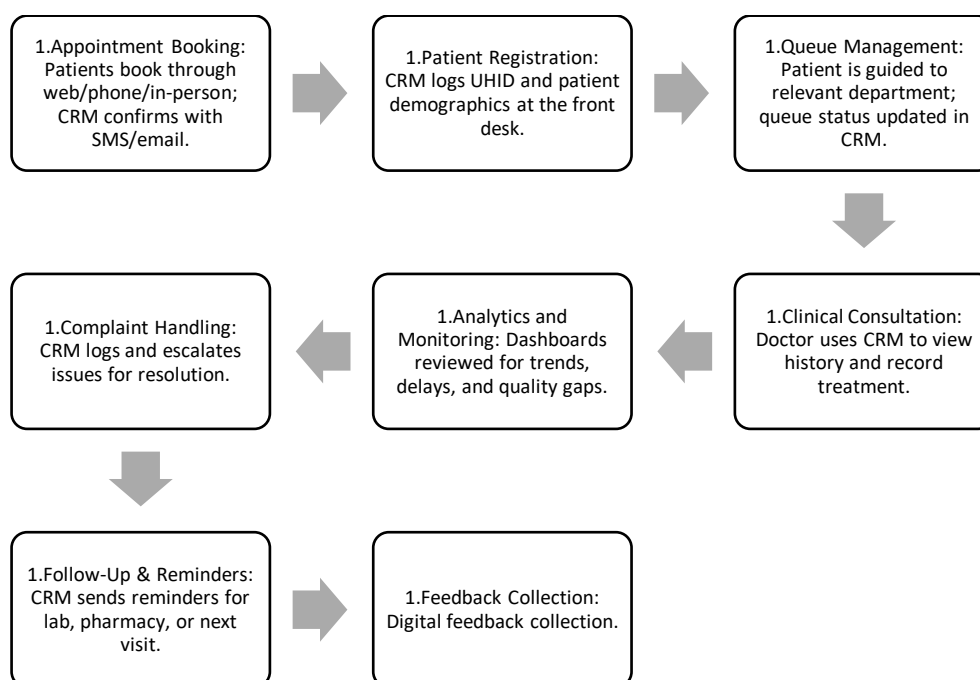
I. Reporting and Dashboard Usage

- Department heads and managers access daily dashboards for patient volumes, wait times, and service ratings.
- While CRM generates these reports automatically, action on trends is limited, pointing to a gap in data utilization.

J. Staff Involvement and System Usage

- Front-line staff are familiar with basic CRM functions but lack training in advanced features like reporting or trend analysis.
- Compliance with CRM documentation is generally good but drops during peak patient hours, when manual interventions increase.

Flowchart for CRM Process:



Online/ e survey/ Google Survey findings

A total of 80 patients from the OPD of Apollomedics Super Specialty Hospitals, Lucknow, participated in the survey. Except registration quickness service area where only 70 respondents responded, all respondents responded.

All patients were aged 18 years or older and had used hospital services that involved Customer Relationship Management (CRM), such as appointment booking, registration, feedback, or communication services.

Demographic Profile of Respondents

The results show that there was almost gender balance in the respondents as 56 per cent were men patients. Nearly one-fourth of the patients fall in each age group of the young adults (18-25 years) and adults (26-35 years). About 35 per cent cases fall in 36-50 age group followed by 18 percent were above the age of 50 years. Average age of the respondents was found to be 36-37 years.

Table 1 presents the percentage distribution of patient responses across eight key CRM service dimensions. The results indicate that the highest satisfaction was observed with 'Registration Quickness', as 71% of patients responded in affirmative, followed by cleanliness (66%), Staff Courtesy, Cleanliness and Appointment Booking (61% each). Overall, most of the patients

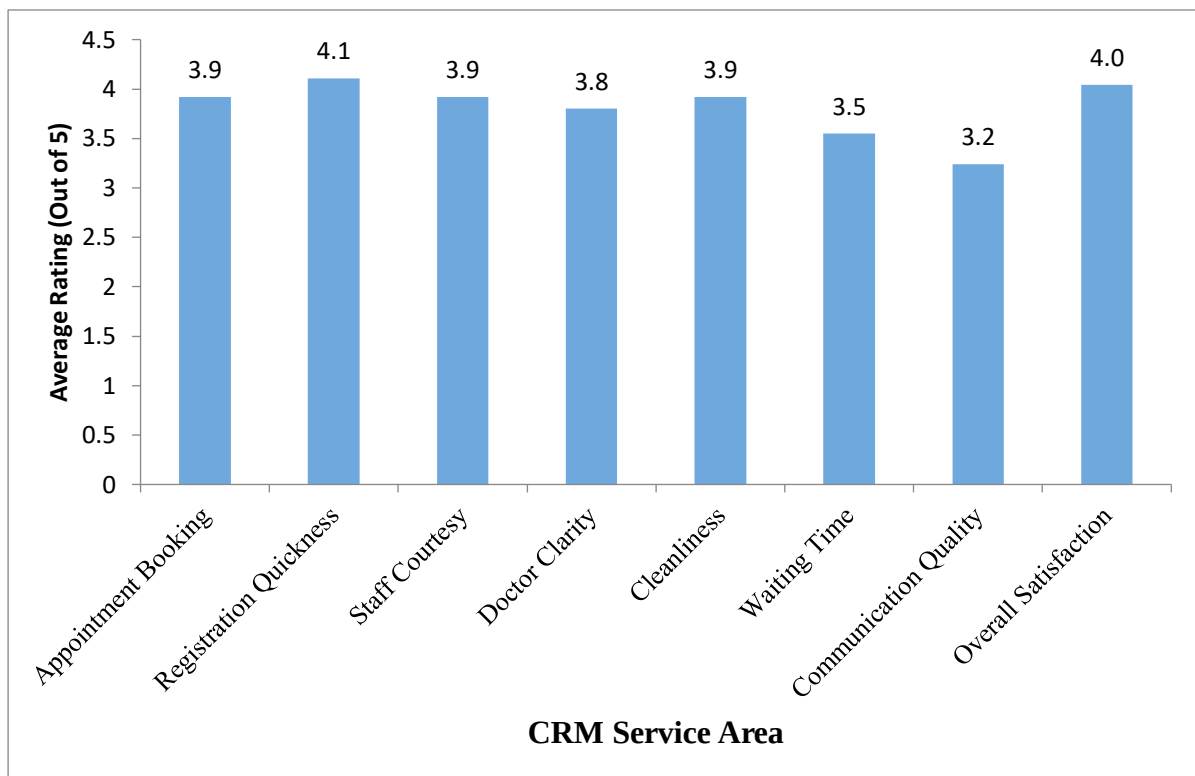
(64%) expressed satisfaction with their outpatient experience, as indicated by their responses in the Overall Satisfaction category.

Table 1: Per cent distribution of respondents by their response on patient satisfaction by CRM services

CRM Service	Disagree	Neutral	Agree	Strongly Agree
Appointment Booking Ease (n=80)	0	31 (39%)	24 (30%)	25 (31%)
Registration quickness (n=70)	0	20 (29%)	21 (30%)	29 (41%)
Staff courtesy (n=80)	0	31 (39%)	24 (30%)	25 (31%)
Doctor clarity (n=80)	0	35 (44%)	26 (32%)	19 (24%)
Cleanliness (n=80)	0	27 (34%)	32 (40%)	21 (26%)
Waiting time satisfaction(n=80)	17 (21%)	20 (29%)	25 (31%)	18 (22%)
Communication quality (n=80)	26 (32%)	24 (30%)	15 (19%)	15 (19%)
Overall satisfaction (n=80)	0	29 (36%)	19 (24%)	32 (40%)

Figure 1 displays the average rating (out of 5) for each CRM service area. The highest rating was for Registration Quickness (4.1), followed by Overall Satisfaction (4), and other areas like Staff Courtesy, Appointment Booking, and Cleanliness (each at 3.9). Doctor Clarity received a moderate average of 3.8, while Waiting Time Satisfaction scored 3.5. Communication Quality, with an average rating of 3.2, was the lowest, highlighting it as a key area requiring attention. The high overall satisfaction score suggests CRM is functioning well, but communication remains a critical area for improvement.

Fig 1: Average patient satisfaction ratings by CRM services



Hindering factors

Patient Registration: Manual registration or repetitive data entry causes delays, especially for returning patients.

Real-Time Queue Management: Patients frequently complain about unanticipated delays or lack of updates while waiting.

Improved Patient Communication: Communication gaps between the hospital and patients regarding reports, rescheduling, and billing are common.

Structured Feedback Collection: Feedback is not always collected in a consistent or timely manner.

Follow-Up and Review Coordination: Patients often miss follow-up dates due to lack of reminders.

Complaint and Grievance Management: Patients lack a formal channel to report service concerns during OPD visits.

Integration with Diagnostic and Billing Services: Patients require guidance after consultations for tests and billing, often resulting in confusion or delay.

Data Analytics and Performance Insights: Managers lack real-time visibility into OPD trends, such as peak hours, patient dropouts, or feedback scores.

Training and Compliance Monitoring: Inconsistent CRM usage by staff members affects the quality of data and service standardization.

To summarize, the results show

- Patients are generally satisfied with registration, staff behaviour, and cleanliness.
- Patients didn't feel well-informed through SMS or follow-ups. The communication system, including reminders or post-visit engagement, is the lowest-rated area.
- Waiting time satisfaction is moderate, and statistically shown to influence overall satisfaction. However, patients expect faster service
- The average overall satisfaction score is 4, indicating that CRM efforts are mostly effective but need targeted improvements.

Chapter 5: Discussion

The study results clearly show that the Customer Relationship Management (CRM) system at Apollomedics Super Specialty Hospitals plays a significant role in shaping patient experience in the OPD. Patients reported high satisfaction in areas such as registration speed, staff behaviour, and cleanliness, all of which received average ratings close to or above 4 out of 5.

However, areas such as communication effectiveness (SMS reminders, updates, follow-ups) and waiting time management received relatively lower ratings. While patients appreciated the efficiency of the front-desk and clinical services, delays and lack of proactive updates negatively impacted their perception in certain areas.

Overall, CRM has made a positive contribution to outpatient service quality, but gaps remain in automation, integration, and personalized communication.

This study aligns with global and national findings:

- Amuddin & Damis (2024) found that CRM significantly improves the hospital's image and increases satisfaction through communication and engagement.
- Gunaseelaprabhu & Umamaheswaran (2025) reported CRM effectiveness in enhancing loyalty and follow-ups but highlighted communication as a common weakness — echoed in our findings.
- Yaghoubi et al. (2017) confirmed that CRM systems improve operational productivity and trust, which supports the positive feedback received in areas like staff behavior and cleanliness.
- Sharma et al. (2024) identified implementation issues in Indian hospitals that limit CRM's full potential — which is reflected in the communication gaps seen at Apollomedics.

The study shows that CRM is performing well in improving service delivery, especially in areas like registration and staff engagement. However, patient dissatisfaction with communication tools and waiting time suggests the need for stronger CRM integration with automated systems. The findings are consistent with previous research, and the study highlights practical opportunities to make CRM more responsive and effective in OPD management.

Chapter 6: Conclusion

This study assessed the implementation and impact of Customer Relationship Management (CRM) on outpatient service delivery and patient satisfaction at Apollomedics Super Specialty Hospitals, Lucknow. The findings confirm that CRM plays a critical role in enhancing operational efficiency, patient experience, and administrative coordination.

Most patients reported satisfaction with registration speed, appointment booking, staff behaviour, and hospital cleanliness. These outcomes demonstrate the value of CRM in streamlining workflows and improving the hospital's front-end operations. However, notable dissatisfaction was observed in communication-related areas, including reminders, follow-up coordination, and clarity of information, indicating a partial disconnect between CRM design and execution.

In conclusion, CRM is a powerful enabler of patient-centered service delivery, but its effectiveness is dependent on continuous optimization, proper staff usage, and integration with other hospital systems.

The study offers important implications for hospital management and healthcare service delivery:

For Hospital Administrators

- Real-time CRM dashboards can help track patient flow, waiting times, and service feedback for continuous improvement.
- Investing in queue management and automated response systems can directly impact satisfaction metrics.

For IT and Operations Teams

- CRM software should be upgraded to include multilingual communication, AI-based reminders, and analytics for demand forecasting.
- Integration with Electronic Medical Records (EMR), billing, pharmacy, and diagnostics is essential for seamless patient experience.

For Quality & Training Teams

- Patient feedback through CRM must be regularly reviewed and used as a metric in performance evaluations.
- CRM training should be part of regular capacity building for front-line staff to ensure consistent service delivery.

Recommendations

Strengthen CRM Communication Features

- Use automated, multilingual SMS/email reminders for appointments, reports, billing updates, and follow-ups.
- Add WhatsApp or mobile app notifications for real-time updates and service queries.

Implement Smart Queue and Waiting Time Systems

- CRM must provide auto-fill and patient history retrieval features to minimize front-desk congestion.
- There is a need for CRM-enabled queue tracking and patient notification (e.g., display boards, SMS -based token alerts and email notifications for every stage of the OPD journey to reduce uncertainty.
- Use CRM data to manage patient load and reduce appointment overlaps.

Enhance Feedback Capture and Utilization

- Deploy real-time digital feedback tools (tablets or QR codes).
- Include CRM-based feedback reports in departmental review meetings.
- CRM must enable real-time, post-consultation feedback via digital forms or mobile links, and ensure that it is accessible to the quality team.
- CRM should have a user-friendly grievance redressal module that logs, tracks, and closes complaints within a defined TAT (Turn-Around Time).

Continuous CRM Training for Staff

- Train front-desk and call centre teams in CRM etiquette, timely response logging, and complaint escalation.
- Encourage doctors to check CRM dashboards for patient history and service preferences. CRM need to include dashboards and trend analysis to support planning and resource allocation.
- There is a recurring need for staff training programs, usage tracking, and periodic audits to ensure CRM tools are used correctly.

Expand CRM Integration Scope

- CRM must be linked with diagnostic services, pharmacy, and billing departments to provide a seamless care pathway.

Chapter 7: References

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Annexure - CRM Policy and Guidelines Documents

1. CRM Policy Documents:

- Customer Relationship Management Policy
- OPD Registration and Appointment Management Policy
- CRM-based Communication Policy
- CRM Feedback and Complaint Handling Policy
- Patient Privacy and Data Security Policy

2. CRM Operational Guidelines:

- Appointment Booking Protocols via CRM
- OPD Registration and Data Entry Guidelines
- CRM Follow-Up and Reminder Protocols
- Complaint and Grievance Redressal Guidelines
- Feedback Collection SOP

3. CRM Strategic Documents:

- Digital Strategy for OPD Management
- Multi-channel Patient Engagement Strategy
- CRM Analytics and Dashboard Utilization Strategy
- Patient-Centered CRM Optimization Plan
- CRM Training and Staff Onboarding Strategy