SUMMER INTERNSHIP PROGRAM

At

Apollo Hospital, Bannerghatta

12/May/2025 to 21/July/2025

A REPORT BY

NISHI MARY JACOB

Master of Business Administration

MBA (Hospital and Health Management)

2010

2024-26

under the Mentorship of

Dr.Vidya Bhushan Tripathi

Assistant Professor

21st July 2025

INTERNSHIP CERTIFICATE

This is to certify that **Ms. Nishi Mary Jacob** has successfully completed her **Internship and Project** in the **Department of Finance (Credit Cell)** from **12th May 2025** to **21st July 2025** in **Apollo Hospitals, Bannerghatta, Bangalore**. She was diligently involved in the tasks assigned to her.

During her internship she successfully completed the following project:

Analytical Study of Inpatient Insurance Claim and Insurance Company Performance with Departmental Insights in the Credit Cell of Apollo Hospital, Bannerghatta.

During her period of stay with us, we found that she was dedicated, hardworking, loyal and sincere.

We wish her all the best for her future endeavours.

For Apollo Hospitals Bangalore,

O. Deepti

Ms. Deepti Oleti
Assistant Manager – Human Resources

APOLLO HOSPITALS BANGALORE-560076

IIHMR UNIVERSITY

IIHMR University Faculty Mentor Approval

This is to certify that **Ms. Nishi Mary Jacob** of academic year 2024-26 of **Institute of Health Management Research** has prepared a poster with respect to her summer internship held during May-July 2025,

She has carried out work as per the guidelines. Her poster is approved for presentation,

28/07/2025

Date: 28/07/2025

Dr. Vidya Bhushan Tripathi

Assistant. Professor

A PRACTICAL INSIGHT INTO INSURANCE CLAIM PROCESSING AND HOSPITAL BILLING WORKFLOW IN TERTIARY CARE SETTINGS (APOLLO HOSPITAL ,BANNERGHATTA)

MISSION
Our mission is to bring healthcare of International standards within the reach of every individual. We are committed to the achievement and maintenance of excellence in education, research and healthcare for the benefit of humanity.

VISION
Touch a Billion Lives

ABOUT APOLLO HOSPITAL

Apollo Hospital, Bannerghatta Road, Bengaluru, is a premier multi specialty tertiary care hospital known for its world-class infrastructure, cutting-edge technology, and expert medical professionals. As part of the renowned Apollo Hospitals Group, it offers comprehensive healthcare services across various specialties including Cardiology, Oncology, Neurology, Orthopedics, and more. With a strong focus on patient-centric care, innovation, and clinical excellence, Apollo Bannerghatta has earned a reputation as one of the leading healthcare institutions in South India

- NAME- NISHI MARY JACOB
- ROLL.NO-: 2010
- STREAM-: MBA(HM)
- BATCH- 2024-2026
- ORGANIZATION NAME-: Apollo Hospital, Bannerghatta
- Organization Mentor-: Radha P
- Faculty Mentor-: Dr.Vidya Bhushan Tripathi
- University Name-: IIHMR University

CHALLENGES FACED

- Delay in receiving discharge summaries from departments.
- Incomplete or incorrect documentation from wards and patients.
- Difficulty in resolving FTC (Failed to Claim) errors within time limits.
- Coordination gaps between billing, medical, and TPA teams.
- Handling multiple software systems with varying data inputs

LEARNING OUTCOMES

- Gained hands-on experience in insurance claim processing.
- Understood the end-to-end hospital billing and discharge workflow.
- Improved skills in using hospital software for real-time data tracking.

LINKING THEORY TO PRACTICAL

- Utilized knowledge of Hospital Operations Management during discharge planning and workflow optimization.
- Practical exposure to Healthcare IT Systems by working with software for real-time discharge tracking and claim submission.
- Understood importance of Quality Standards (NABH) in maintaining documentation accuracy and audit readiness.

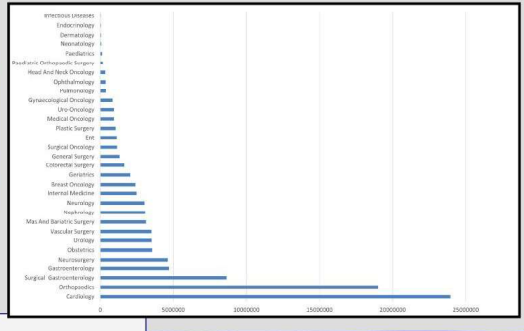
SWOT ANALYSIS

ORGANIZATIONAL CHARTS

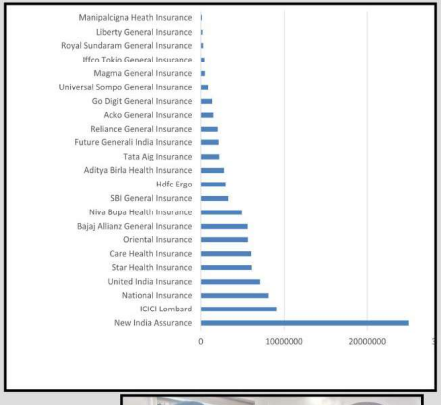
INTRODUCTION OF PROJECT

- This project focuses exclusively on IP Patients, analyzing insurance claim data to identify which insurance companies contribute the highest claim amounts, frequencies, and averages. It also highlights the top revenue-generating departments within the hospital and examines which insurers are most significant in those departments. The findings aim to support data-driven decisions for optimizing revenue cycles and strengthening hospital-insurer coordination.

DEPARTMENT-WISE CLAIM ANALYSIS(1 MONTH)



INSURANCE COMPANIES CLAIM ANALYSIS(1 MONTH)



OBJECTIVES

- To study the insurance claim processing cycle, including documentation, pre-authorization, claim submission, and settlement mechanisms in a tertiary care hospital.
- To identify common challenges and delays in hospital billing and insurance claim processing from an operational perspective.

RESULTS

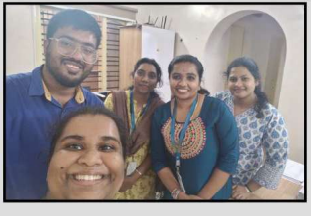
- New India Assurance had the highest total claim value and claim count among all TPAs.
- Star Health recorded the highest average claim amount per case.
- The top three revenue-generating departments were Cardiology, Oncology, and Orthopedics.
- Within these departments, New India Assurance and Medi Assist emerged as the top-paying insurers.
- Significant variation was observed in claim contributions across insurers and departments, highlighting potential for optimization in TPA coordination

RECOMMENDATION

- Improve coordination with top-performing TPAs.
- Train staff in key departments on proper documentation.
- Use analytics dashboards for real-time claim tracking.
- Prioritize high-value TPAs in empanelment decisions.

SUGGESTION

- Streamline discharge summary submission.
- Integrate claim-related software systems.
- Use dashboards to track claim status daily.
- Provide regular training on documentation.



Weekly Report-1

Name of the Organisation: Apollo Hospital Bannerghatta

Area/ Department/ Project of Summer Internship Program: FINANCE (Credit cell)

Name of the Student: Nishi Mary Jacob

Roll no: 2010 **Stream:** Hospital and Health Management (MBA)

Week no: 1 **From:** 12 MAY 2025 **to** 17 MAY 2025

Activity Done	Physical Verification, system verification, validating and submitting of patients bills to the insurance companies, this activity also included scanning and uploading, three step verification system and submission using claim book.
Linking theory (Classroom learning) with practice at your organisation	Maintaining data privacy and security, Use of Motivation theories can be observed if looked properly.
Gaps identified on the working area.	Routine work, Endless paperwork as claims of all 3 branch goes through this one, Limited space, Uncomfortable work environment.
Suggestions for improvement	Providing proper infrastructure, daily targets instead of just working might increase productivity, Recruit more people to deal with the huge amount of paperwork.
Plan for the next week	As one intern will be less in the department might have to pick up additional work and might be shifted to another department.

Weekly Report-2

Name of the Organisation: Apollo Hospital Bannerghatta

Area/ Department/ Project of Summer Internship Program: Finance- credit cell

Name of the Student: Nishi Mary Jacob

Roll no: 2010 **Stream:** MBA in Hospital and Health management

Week no: 2 **From:** 19th May 2025 **to** 24th May 2025

Activity Done	• Collected and uploaded patient documents into the hospital system. • Validated claims and checked patient admission files for completeness. • Assisted in verifying discharge summaries and related patient data. • Participated in cross-checking physical records against system data. • Observed operational procedures in front office and claims department. • Conducted checklist reviews and monitored the flow of documentation.
Linking theory (Classroom learning) with practice at your organisation	• Applied theoretical knowledge of **hospital workflow management** to observe real-time front desk and claims processing systems. • Used concepts from **Health Information Management** to understand document storage, retrieval, and system-based validation. • Practiced **data confidentiality and ethics**, aligning with classroom teachings on patient data handling protocols. • Gained practical exposure to **Quality Assurance in Healthcare**, especially in verifying accuracy and completeness of records
Gaps identified on the working area.	• Delay in updating patient information in the hospital management system. • Occasional mismatch between hardcopy files and system-entered data. • Lack of standardized formats for some internal documentation. • Limited digital integration between departments, leading to redundancy.

	• Inadequate orientation or task clarity for new interns at the beginning.
Suggestions for improvement	• Standardize documentation formats across all departments. • Provide **structured orientation and task guides** for interns to ensure faster adaptation. • Conduct regular audits and feedback loops to detect and fix data mismatches early.
Plan for the next week	Learning a new software for physical validation. Will be trained in it for smoother claims procedures.

Weekly Report-3

Name of the Organisation: Apollo hospital Bannerghatta

Area/ Department/ Project of Summer Internship Program: Finance Credit Cell

Name of the Student: Nishi Mary Jacob

Roll no;2010 Stream: HM

Week no: 3 From:26-05-2025 to 31-05-2025

Activity Done	Assisted in collecting and uploading patient-related documents into the hospital's digital management system. Verified and validated claim files and admission documents for accuracy and completeness. Reviewed discharge summaries and cross-checked them with hospital records for consistency. Supported the reconciliation of physical patient files with system entries.
Linking theory (Classroom learning) with practice at your organisation	Applied classroom concepts of hospital operations and workflow management while observing real-time departmental functions. Utilized knowledge from Health Information Management to understand the procedures involved in document handling, storage, and digital verification. Practiced healthcare data ethics and confidentiality principles during patient data processing.
Gaps identified on the working area.	• Delays were observed in the timely updating of patient data in the digital system. • Instances of discrepancies between physical records and digital entries were noted.

	• Documentation formats varied across departments, causing inconsistencies
Suggestions for improvement	Standardize documentation formats to ensure consistency across all units. Develop a comprehensive orientation module for interns, including task guidelines and department overviews. Establish a routine audit and feedback mechanism to regularly identify and correct data inconsistencies.
Plan for the next week	Learning the not introduced in the department for faster processing

Weekly Report-4

Name of the Organisation: Nishi Mary Jacob

Area/ Department/ Project of Summer Internship Program: Finance Credit Cell

Name of the Student: Nishi Mary Jacob

Roll no:2010 Stream: HM

Week no: 4 From:02-06-2025 to 07-06-2025

Activity Done	• Participated in checklist verification processes and monitored documentation flow. • Worked on a project that involved conducting a **weekly trend analysis** of different insurance companies and their respective claim amounts. • Gained exposure to a newly introduced **automation bot** that collects data from multiple platforms such as **Medimantra and PACS**, and directly uploads it into the **claim book**, streamlining the documentation process.
Linking theory (Classroom learning) with practice at your organisation	• Experienced how **quality assurance** is implemented through tasks like claim validation and document audits. • The weekly analysis project aligned with academic training in **healthcare data analytics**, involving the identification of trends in claim patterns across insurers. • Learned about the application of **health IT systems and automation tools**, especially in the integration of data from multiple sources to improve operational efficiency.
Gaps identified on the working area.	• Lack of uniformity in documentation formats across departments created inconsistencies. • Limited integration between systems resulted in redundant entries and inefficiencies. • Frequent **and spontaneous changes in insurance rules and processes** often caught staff and interns off guard, leading to confusion and rework.

Suggestions for improvement	• Establish a **structured induction program for interns**, covering departmental workflows and role expectations. • Introduce a **live policy update board or notification system** to help staff stay informed about sudden rule changes from insurers. • Continue supporting innovations like the **automation bot**, and evaluate its effectiveness regularly to ensure optimal use and minimal system errors.
Plan for the next week	Work more towards the project

Weekly Report-5

Name of the Organisation: Apollo hospital Bannerghatta

Area/ Department/ Project of Summer Internship Program: Finance Credit Cell

Name of the Student: Nishi Mary Jacob

Roll no: 2010 Stream: HM(MBA)

Week no: 5 From: 0G/06/25 To: 21/06/25

Activity Done	• Initiated and actively contributed to a project analyzing **weekly claim trends across various insurance companies**, focusing on claim frequency and value. • Participated in the rollout phase of a **new data automation bot** designed to extract information from platforms like **Medmantra** and **PACS**, and upload directly to the hospital's claim book. • Shadowed claim officers and learned system navigation, verification steps, and submission protocols.
Linking theory (Classroom learning) with practice at your organisation	• Concepts from **hospital administration and process flow** were clearly reflected during task assignments in admissions and claims departments. • Gained hands-on exposure to **health records management**, reinforcing theoretical modules on patient information handling and storage. • Understood the importance of **interdepartmental coordination** and data standardization – core components of healthcare operations coursework.
Gaps identified on the working area.	Document uploads and data updates were not always synchronized in real time, leading to occasional claim delays. Physical documents and digital entries often showed minor inconsistencies, indicating manual entry errors. No uniform document format was followed, especially for internal case summaries, which complicated cross-checking.
Suggestions for improvement	• Create a **live update dashboard** for internal use that immediately alerts staff of any policy or rule changes from insurance companies.

	• Develop a **structured onboarding module for interns**, including departmental rotation, task lists, and weekly targets to improve clarity and involvement. • Regularly analyze insurance trends to proactively adjust workflows and documentation to suit insurer requirements.
Plan for the next week	Work more on the research project and bot work

Weekly Report-6

Name of the Organisation: Apollo hospital

Area/ Department/ Project of Summer Internship Program: Finance (Credit Cell)

Name of the Student: Nishi Mary Jacob

Roll no: 2010 Stream: MBA(HM)

Week no: 6 From:16/06/2025 to 21/06/2025

Activity Done	• Played an active role in **physically validating the bot-generated cases** to ensure accuracy and completeness before claim submission. • Conducted a **weekly review of claim submissions by insurance company**, helping to identify patterns in approval amounts and documentation requirements. • Supported daily operations in a fast-paced setting, especially during claim finalization deadlines, which demanded quick turnarounds with minimal errors
Linking theory (Classroom learning) with practice at your organisation	• The real-world setting allowed application of concepts from **hospital process mapping**, where I could visualize the complete claims workflow from admission to insurance payout. • Learned to apply **medical record management** techniques when handling bundled documents for large patient files. • Observed and applied theoretical knowledge on **quality checks and error reduction** while validating bot entries
Gaps identified on the working area.	• The automation bot, while efficient, sometimes captures incomplete or incorrectly tagged data—requiring close manual verification. • No standardized checklist across departments for case documentation, resulting in inconsistencies. • Frequently changing claim policies and insurer-specific rules often create confusion and slow down the process. • Interns were expected to perform under **tight timelines** without proper onboarding or clarity about department expectations

Suggestions for improvement	• Develop and distribute a **unified case checklist** to standardize documentation for all insurance types. • Regularly review and update bot logic to reduce incorrect data pulls and enhance reliability. • Provide **a dedicated dashboard for real-time insurance policy updates** to keep all staff informed of changes
Plan for the next week	Learning bot further and ensuring efficient handling

Weekly Report-7

Name of the Organisation: Apollo hospital Bannerghatta

Area/ Department/ Project of Summer Internship Program: Finance (Credit Cell)

Name of the Student: Nishi Mary Jacob

Roll no: 2010 Stream: HM

Week no: 7

From: 23/06/2025 to: 28/06/2025

Activity Done	• Took on the responsibility of **handling cases received via the automation bot**, reviewing each file for accuracy and completeness. • Began performing **bot case verification independently**, ensuring that all pulled data matched with hospital documentation standards. • Coordinated the process of **arranging validated claim files for physical courier dispatch**, meeting daily cut-off schedules
Linking theory (Classroom learning) with practice at your organisation	• Learned to balance speed with precision while working on time-sensitive claim files, especially those tied to strict submission deadlines. • Developed a systematic approach to **handling large amounts of unstructured data**, including sorting, naming, and tagging documents for easy retrieval. • Gained confidence in navigating hospital information systems and understanding **how automation (bot tools) can streamline—but also complicate—data handling** when not monitored closely
Gaps identified on the working area.	• Encountered **infrastructure limitations**, such as slow systems, limited scanning equipment, and occasional file access issues, especially when working on older records. • The **bot tool**, though efficient, sometimes retrieved incomplete or mismatched data, increasing the need for double-checking. • The workflow lacked a clear backup system, putting pressure on team members when technical issues or downtimes occurred. • Experienced **mental fatigue and a growing fear of burnout**, particularly during back-to-back high-volume days with little recovery time.

Suggestions for improvement	Refine the automation bot's logic to reduce the number of incomplete or incorrect data pulls, and build in a validation checklist. Create a buffer system or backup teams during heavy workload days to minimize overburdening a few individuals. Introduce scheduled breaks and rotate interns across tasks to reduce the risk of mental fatigue and repetitive strain
Plan for the next week	Work on the project alongside regular work.

Weekly Report-8

Name of the Organisation: Apollo hospital Bannerghatta

Area/ Department/ Project of Summer Internship Program: Finance (Credit Cell)

Name of the Student: Nishi Mary Jacob

Roll no: 2010 Stream: HM

Week no: 8

From: 30/06/2025 to: 05/07/2025

Activity Done	• Took over **independent responsibility for managing bot files**, identifying missing data and following up when needed. • Utilized **new software to access real-time discharge data**, enabling proactive claim planning based on patient discharges. • Worked on resolving **FTC (Failure to Claim)** errors by correcting digital inconsistencies and submitting cases **without needing physical documents**
Linking theory (Classroom learning) with practice at your organisation	• Gained practical experience in **working with automation bots** and validating system-fetched data. • Learned to plan claims effectively by **tracking discharges in real-time**, improving efficiency. • Understood how to manage and solve **FTC errors**, ensuring smooth digital submissions. • Improved ability to **handle large volumes of data** in a fast-paced, deadline-driven environment.
Gaps identified on the working area.	• **System slowdowns** and limited scanner access during peak hours caused delays. • **Bot errors** (incomplete or mismatched data) required regular manual intervention. • TPA rules and documentation requirements changed **frequently without notice**, disrupting workflows. • The **lack of structured onboarding** made the initial phase confusing.

	• Physical space and resources were limited during high-volume courier dispatch days.
Suggestions for improvement	• Standardize **FTC case handling guidelines** and workflows. • Design a structured **intern onboarding module** with clear task flow and software training. • Introduce task rotation to reduce fatigue and repetitive strain. • Allocate specific workspaces for document sorting and courier prep. • Implement a **real-time claim and courier tracking system**.
Plan for the next week	Continue working to better the bot.

Weekly Report-G

Name of the Organisation: Apollo hospital Bannerghatta

Area/ Department/ Project of Summer Internship Program: Finance (Credit Cell)

Name of the Student: Nishi Mary Jacob

Roll no: 2010 Stream: MBA(HM)

Week no: G From: 7/07/2025to 13/07/2025

Activity Done	• Coordinated the process of **arranging validated claim files for physical courier dispatch**, meeting daily cut-off schedules. • Maintained daily logs of processed cases and supported documentation audits conducted by the claims department. • Contributed to a **project analyzing trends in insurance claim submissions and settlement patterns**, focusing on high-frequency insurers
Linking theory (Classroom learning) with practice at your organisation	Realized the importance of physical verification even in a digitally driven environment, especially when preparing finalized files for courier. Understood how every department contributes to claim processing and how coordination affects overall turnaround times. Improved my adaptability in dealing with constant rule changes from insurance firms, learning to quickly adjust without compromising quality.
Gaps identified on the working area.	• Experienced **mental fatigue and a growing fear of burnout**, particularly during back-to-back high-volume days with little recovery time. • There was no structured mechanism in place to support interns under pressure or provide real-time feedback during task transitions. • The physical document dispatch process often ran on tight deadlines with minimal margin for error or delay, adding to daily stress.

Suggestions for improvement	• Introduce scheduled breaks and rotate interns across tasks to reduce the risk of mental fatigue and repetitive strain. • Develop a task-tracking dashboard that allows real-time updates on courier dispatches, claim status, and file completion. • Provide structured guidance and debriefs for interns working in high-stakes or high-pressure roles to promote both learning and well-being
Plan for the next week	Complete the project and do all the winding up task.

Weekly Report-10

Name of the Organisation: Apollo hospital Bannerghatta

Area/ Department/ Project of Summer Internship Program: Finance (Credit Cell)

Name of the Student: Nishi Mary Jacob

Roll no: 2010 Stream: MBA(HM)

Week no: 10 From: 15/07/2025to 21/07/2025

Activity Done	• Prepared claim documents for **daily courier dispatch**, ensuring proper order, completeness, and packaging. • Participated in a **weekly insurance claim trend analysis**, helping identify approval patterns and TPA-specific delays. • Coordinated with multiple departments (front office, records, billing) for missing documents and case completion. • Maintained daily logs of processed, pending, and couriered cases to support internal monitoring.
Linking theory (Classroom learning) with practice at your organisation	• Strengthened coordination and communication skills while working across multiple departments. • Learned to **multi-task using various software platforms** and still maintain high accuracy. • Built resilience and adaptability by staying composed during high-pressure courier deadlines and data surges. • Realized the impact of even small errors on claim outcomes — improving attention to detail. • Gained confidence in working independently and taking initiative.
Gaps identified on the working area.	• Physical space and resources were limited during high-volume courier dispatch days. • **Mental fatigue and risk of burnout** were real during consecutive high-load days. • Managing **multiple software systems at once** was overwhelming at first.

	• FTC cases were harder to track without a dedicated monitoring system.
Suggestions for improvement	• Introduce task rotation to reduce fatigue and repetitive strain. • Allocate specific workspaces for document sorting and courier prep. • Implement a **real-time claim and courier tracking system**. • Schedule regular intern check-ins or debriefs to improve engagement and support. • Promote more **paperless processes**, encouraging digital-only claim submissions wherever possible.
Plan for the next week	Complete the project and do all the winding up task.

Compiled Reporting Format

Name of the Organisation: Apollo Hospital, Bannerghatta

Area/ Department/ Project of Summer Internship Program:

Finance (Credit Cell)

Name of the Student: Nishi Mary Jacob

Roll no: 2010 Stream: MBA(HM)

Activity Done	• Collected and uploaded patient documents (admission forms, discharge summaries, investigation reports, bills) into the hospital's claim processing system. • Handled **bot-generated claim cases**, extracted through platforms like **Medimantra** and **PACS**. • Performed **physical validation** of these automated files to ensure completeness and accuracy. • Took up independent responsibility for managing bot cases and submitting them through the digital system. • Used a **new software tool to access real-time discharge data**, which helped plan claim processing workflows more efficiently. • Worked on resolving **FTC (Failure to Claim) errors**, enabling digital submission of claims without physical documents. • Assisted in **daily preparation of claim files for courier dispatch**, ensuring accuracy and timely delivery. • Conducted **weekly analysis of insurance company claim trends**, identifying common rejection reasons and claim patterns. • Maintained daily logs of completed, pending, and dispatched cases for internal tracking. • Coordinated with the front desk, records, billing, and medical departments for retrieving missing documents.
Linking theory (Classroom learning) with practice at your organisation	• Developed a strong understanding of **hospital insurance workflows** and claim lifecycles. • Gained hands-on experience with **automation tools** and their role in streamlining healthcare documentation. • Learned to manage **large volumes of data under tight deadlines** with precision.

	• Understood the **importance of document completeness** and validation in preventing claim rejections. • Improved communication and coordination skills across multiple departments. • Adapted to working with **multiple digital platforms** simultaneously and troubleshooting system errors. • Learned how to **solve FTC errors** and submit claims through a fully paperless process. • Built confidence in managing tasks independently and taking ownership of responsibilities. • Strengthened analytical thinking through weekly insurance trend reporting. • Learned to stay composed and efficient even during high-pressure courier deadlines and workload peaks.
Gaps identified on the working area.	System slowdowns and limited scanning stations caused workflow bottlenecks. • Bot-generated files occasionally had incomplete or mismatched data. • Constant **TPA policy changes** were not always communicated in real-time. • No structured onboarding or training in the initial days led to confusion. • Physical workspaces were cramped during busy dispatch periods. • Risk of **mental fatigue and burnout** during continuous high-load days. • Managing and switching between multiple software platforms was initially overwhelming. • Tracking FTC cases without a dedicated system was time-consuming.
Suggestions for improvement	• Upgrade IT infrastructure and increase access to scanners and digital tools.

	• Improve bot accuracy through better programming and validation layers. • Implement a **centralized update board** for all TPA policy and format changes. • Create a **structured induction program for interns** with training modules. • Establish dedicated work zones for document validation and courier prep. • Introduce weekly intern feedback or debrief sessions for support. • Develop a simplified **FTC tracking and submission workflow**. • Promote wider use of **paperless claims** where digital submission is sufficient. • Encourage task rotation among interns to avoid monotony and build diverse skills

Signature of the Student

Approved by the IIHMR University's Mentor

PROJECT WORK

INTRODUCTION

A Practical Insight into Insurance Claim Processing and Hospital Billing Workflow in Tertiary Care Settings (Apollo Hospital, Bannerghatta)

In recent years, the healthcare sector has witnessed a significant shift towards insurance-based services, with an increasing number of patients opting for cashless treatment through various Third-Party Administrators (TPAs). In this context, efficient claim management and coordination between hospitals and TPAs have become critical to ensure timely reimbursements, minimize delays, and enhance patient satisfaction.

This project, conducted during an internship in the Credit Cell of a prominent tertiary care hospital, focuses on analyzing the patterns of insurance claims and evaluating the performance of TPAs across various departments. By studying claim processing times, approval/rejection trends, and departmental claim distribution, the project aims to uncover inefficiencies and propose actionable improvements in the claims workflow.

Through detailed data analysis and visualization, the project seeks to assist hospital management in identifying high-performing TPAs, departments with high claim volume, bottlenecks in claim settlement, and opportunities for strengthening internal processes. The findings of this study are intended to support informed decision-making, improve financial outcomes, and ultimately contribute to a smoother, patient-centric insurance experience within the hospital setting.

FINDINGS

This section presents key insights derived from the analysis of insurance claim data across insurers and departments. The graphs offer a multidimensional view of claim count, average claim value, total sum of claims, and departmental distribution, leading to the following observations:

1. Insurer-Wise Claim Performance

A. Claim Volume (Count of Claims):

- **New India Assurance** emerged as the most frequently used insurer, with the highest number of claims—indicating either broader coverage or stronger hospital affiliation.
- Other top contributors in terms of claim count include **National Insurance**, **United India Insurance**, and **Star Health Insurance**.
- TPAs such as **Royal Sundaram**, **ManipalCigna**, and **Magma** reported minimal claim volumes.

B. Average Claim Value:

- **SBI General Insurance** had the highest **average claim value**, followed closely by **Bajaj Allianz**, **Reliance General**, and **Tata AIG**.
- This indicates that while some insurers have fewer claims, the monetary value per claim is significantly high.
- In contrast, insurers such as **ManipalCigna**, **Liberty**, and **National Insurance** showed the lowest average claim values.

C. Total Claim Amount:

- **New India Assurance** had a disproportionately higher total claim value, driven by both **high volume** and **moderate-to-high average values**.
- **ICICI Lombard** and **National Insurance** also stood out in terms of overall claim payouts.
- Despite high average values, **SBI General** and **Bajaj Allianz** had moderate total claim contributions due to fewer claims.

2. Department-Wise Claim Distribution

A. Highest Claim Value Departments:

- **Cardiology** topped all departments in terms of **total claim value**, highlighting its high-cost procedures and frequent insurance use.
- **Orthopaedics** and **Surgical Gastroenterology** also generated significantly high claim amounts.
- **Gastroenterology**, **Neurosurgery**, and **Obstetrics** followed with moderate contributions.

B. Low Claim Value Departments:

- Departments such as **Infectious Diseases**, **Endocrinology**, **Dermatology**, and **Neonatology** showed minimal claim activity—likely due to lower-cost treatments or OPD dominance.

3. Insurer Performance by Department

A. Cardiology Department:

- **New India Assurance** alone contributed almost **₹80 lakh**, dominating the department's claims.
- Significant contributions also came from **Aditya Birla**, **Bajaj Allianz**, and **ICICI Lombard**.
- This suggests preferential insurer-hospital alignment in high-end cardiac cases.

B. Surgical & Gastroenterology:

- In **Surgical Gastroenterology**, **Star Health**, **New India Assurance**, and **Future Generali** were leading contributors.
- **Gastroenterology** also saw a wide spread of insurer involvement with fairly balanced claims.

C. Orthopaedics:

- **New India Assurance** again had a strong presence, followed by **ICICI Lombard**, **Oriental**, and **Bajaj Allianz**.
- Other insurers had relatively balanced but lower shares, indicating a moderately distributed insurance usage pattern.

Overall Observations

- **New India Assurance** leads consistently across **claim count**, **total claim value**, and several **key departments**, suggesting operational efficiency and hospital reliance.
- **SBI General** and **Bajaj Allianz** stand out in terms of **average claim values**, which may indicate their association with more expensive procedures.
- Departmentally, **Cardiology, Orthopaedics**, and **Surgical Gastroenterology** are the costliest in terms of insurance claims—highlighting them as key financial zones for the hospital.

RECOMMENDATION

1. **Strengthen ties with top TPAs** like New India Assurance and ICICI Lombard for smoother processing and faster settlements.
2. **Negotiate better terms** with insurers showing high average claim values (e.g., SBI General, Bajaj Allianz) to maximize reimbursements.
3. **Streamline processes in high-claim departments** (Cardiology, Orthopaedics, Surgical Gastro) by assigning dedicated claim coordinators and improving documentation.
4. **Improve insurance utilization** in low-claim departments through patient education and staff training on insurance eligibility.
5. **Implement a real-time TPA dashboard** to monitor claim count, rejection reasons, and pending cases for better control.
6. **Conduct regular training sessions** for hospital staff to reduce claim errors and enhance claim approval rates.
7. **Establish a monthly claims review committee** to analyze trends, resolve delays, and take corrective actions.

CHARTS