ANALYSIS OF CLAIM PROCESSING EFFICIENCY AND PATIENT SATISFACTION : A COMPARATIVE STUDY OF INSURANCE AND GOVERNMENT SCHEME BENEFICIARIES AT S.R. KALLA HOSPITAL, JAIPUR

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INTRODUCTION

- India's healthcare system is gradually evolving, with increasing emphasis being placed on patient satisfaction levels and the efficiency of insurance claim processing. This study examines the relationship between insurance coverage, claims handling efficiency, and patient satisfaction at S.R. Kalla hospital in jaipur.
- Patient satisfaction is a critical focus for modern healthcare centers, impacting both service delivery and organizational objectives. This is particularly important for insured patients and those enrolled in government schemes like RGHS and CGHS.
- Factors influencing satisfaction include the quality of medical care, overall patient experience, and efficiency of services from admission to discharge, including payment and reimbursement processes. Healthcare providers must consider patient demographics and specific needs, especially for insured and government scheme beneficiaries who often expect faster service and efficient claim processing.

- Efficient insurance claim handling, involving accurate documentation and timely reimbursement, significantly affects patient satisfaction. Government schemes aim to provide affordable, quality healthcare to specific employee categories and their families, emphasizing accessibility and ease of use. To enhance satisfaction, healthcare organizations should focus on improving appointment systems, streamlining check-in/out procedures, and clearly communicating financial aspects. Continuous improvement based on patient feedback is crucial for maintaining high standards of care and satisfaction in the evolving healthcare landscape.

Healthcare organizations strive to meet patient expectations while achieving organizational objectives. However, it is possible to overlook important details of patients' experiences, especially for those covered by insurance or government programs like the central government health scheme (CGHS) and rajasthan Government health scheme (RGHS).

RESEARCH QUESTION

The major research question targets three areas of interest, namely,

1)What is the current practices of claim processing of Insurance and Government schemes ?

2) What is the patient satisfaction levels of the policyholders at S.R kalla hospital?

3) How patient satisfaction can be improved?

OBJECTIVE

The Major objective is to understand the claim processing aspects and patient satisfaction in SR Kalla Hospital Jaipur.

Three specific objectives are as follows:

- Claim processing of different policyholder's registered under general insurance, CGHS, RGHS.
- Satisfaction level of the policyholders at SR Kalla Hospital.
- Identifying issues to improve performance levels of the hospital and make the patient's stay more satisfying.

LITERATURE REVIEW

Authors (Year)	Study Location	Sample Size	Sampling Technique	Salient Features
Kumari et al. (2016)	6 cities in India (Ranchi, Kolkata, Patna, Jaipur, Shillong, Allahabad)	412 CGHS beneficiaries	Stratified sampling	Assessed beneficiary satisfaction with CGHS services
Devadasan et al. (2011)	Tamil Nadu, India	2669	Stratified random sampling	At ACCORD, no significant difference in satisfaction between insured (82%) and uninsured (73%) At KKVS, insured patients (95%) had significantly higher satisfaction than uninsured (79%)
Saxena N, Singh P, Mishra A (2019)	Chhattisgarh, India	295 data points (merged dataset)	Used insurance claims data from 2013 to 2015	Qualitative comparative analysis (fsQCA) to analyze factors affecting: a) Patient satisfaction b) Overclaiming of insurance c) Disease severity among beneficiaries
Dr. K. Vijaya Chitra, Dr. V. Ramya, and Vijayakumar Gajenderan (2021)	Chennai , India	283 usable responses	Convenience sampling method	A significant relationship between awareness about health insurance products and level of satisfaction
Asghari & Babu (2017)	Bangalore, India	288 health insurance policyholders	Policyholders Convenience non-probability sampling	Used SERVQUAL model to compare service quality gap between private and public health insurance providers
Ms. Jayeeta Majumder and Dr. Soumendra Nath Bandyopadhyay (2018)	Kolkata, India	283 patients	Stratified random sampling	Compared patient satisfaction between accredited private, non-accredited private, and government hospitals
Authors: Rashmi Ananth Pai and Jayashree S. Bhat (2013)	Karnataka, India	120 patients	Not explicitly stated	Private hospitals had higher overall satisfaction (mean 30.35) compared to government hospitals (mean 29.65)
Getaneh et al. (2023)	Legambo district, North-East Ethiopia	807 households	Systematic random sampling	The study concludes that satisfaction was suboptimal and mostly influenced by service-related factors, suggesting areas for improvement by the health insurance agency and health facilities.

METHODOLOGIES

The study examines the extent of the claim processing and patients' satisfaction in SR Kalla Memorial Gastro and General Hospital Jaipur.

- Study design: A cross-sectional study will be adopted in order to compare the claim processing time of general insurance policy holders, CGHS beneficiaries & RGHS beneficiaries and the satisfaction level of the patients.

- Setting: The study will be conducted at S. R. Kalla Memorial Gastro and General Hospital Jaipur

- Study population: The target population entails policyholders of general insurance, cghs and rghs those who had filed claims in the hospital in the one month to three months preceding the survey.

The inclusion criteria are as follows: the inclusion criteria are as follows:

- it is only open to those with policy-holder status in the sector of general insurance, CGHS, or RGHS.

- Duration: 3 Month
- Sample size:

  Regarding the survey on the claim processing time, a sample size of 100 policyholders will be aimed. This includes:

  30 General Insurance policyholders from month of March -June

  35 CGHS beneficiaries from month of Jan - March

  35 RGHS beneficiaries from month of Jan - March

  110 policyholders responded on patients' satisfaction.

- Sampling technique : convenience sampling will be used because of the ease in accessing the targets and the cost aspect.
- Data analysis plan :

  - quantitative data:

  Descriptive statistics: some descriptive statistics such as mean, will be used on the claim processing time data so as to give an idea of the distribution of the data.

- Data collection Method:

Claim processing:

- **Secondary Data** - Hospital Administrative records
  Procedure: about the duration taken from the claim submission process to the approval process, researchers will pull data from the hospital records.

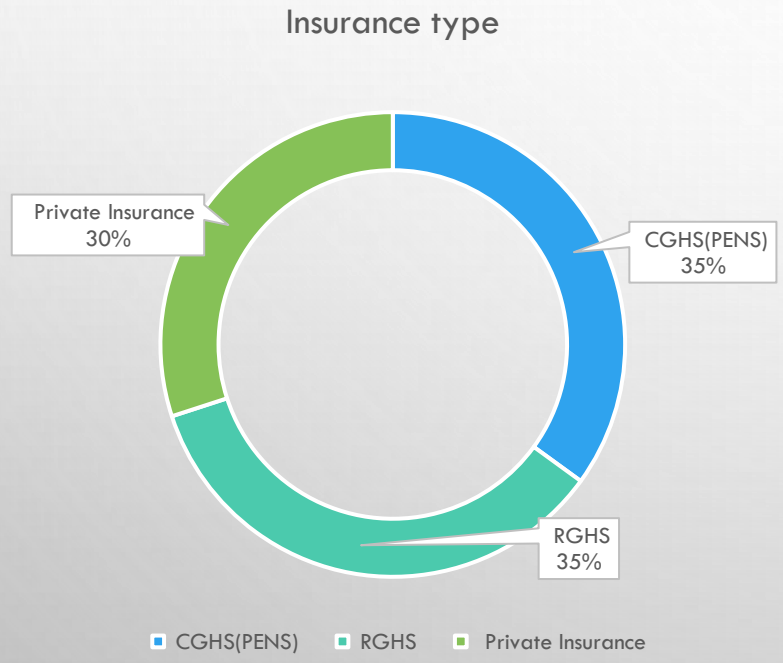
Satisfaction surveys:

Primary Data – A fully developed survey form comprising of two parts; first part determining the patient's overall satisfaction during encounter, the second part is aimed at determining the patient's satisfaction with the entire process of claim processing.

Table : 4.1 Distribution of Insurance type

RESULT

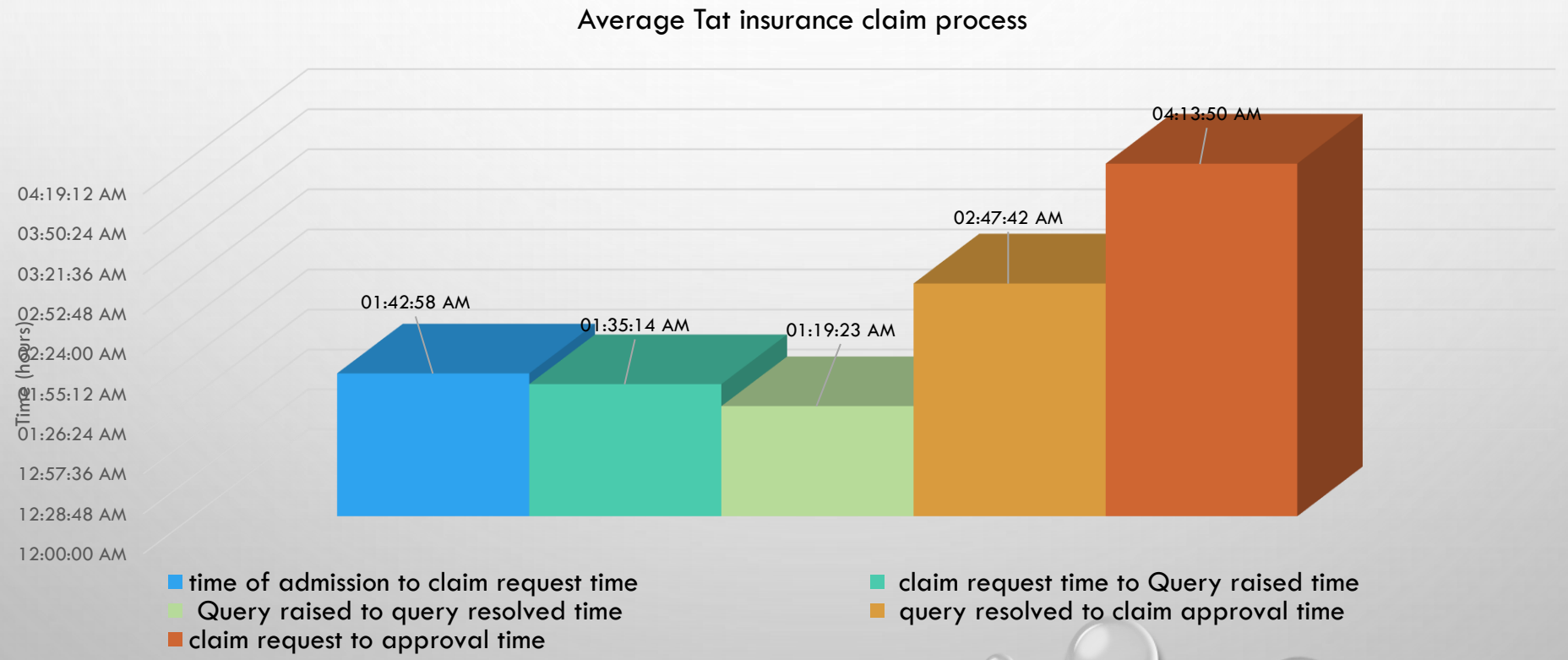
(CLAIM PROCESSING)



Graph indicates that the Insurance type distribution reveals that it contains 3 type of Insurance which has Private insurance : 30% , CGHS (PENS) :35% , RGHS : 35%

- **TABLE : 1 AVERAGE TAT OF INSURANCE CLAIM PROCESS**

Turn Around Time	Time of admission to claim request time	Claim request time to query raised time	Query raised to Query resolved time	Query resolved to Claim approval time	Claim request to Approval time
Average	**01:42:58**	**01:35:14**	**01:19:23**	**02:47:42**	**04:13:50**



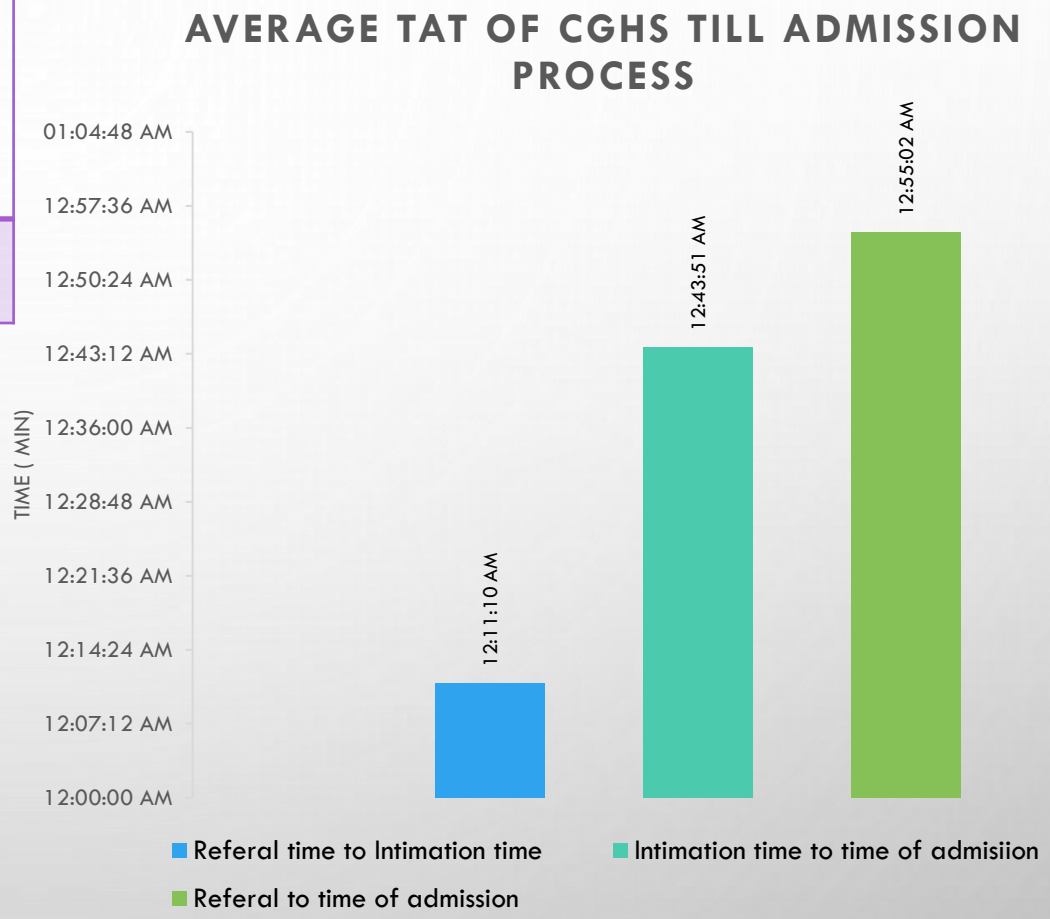
- The current practice of claim processing, particularly in private insurance, demonstrates a remarkable level of efficiency. The entire cycle, from the initial claim request to final approval, typically concludes within a swift 4.5-hour timeframe. This expeditious process underscores the effectiveness of communication channels between healthcare providers and insurance companies.
- Breaking down the process reveals interesting insights:

1. Initial stages: the claim submission and initial review phases are handled with notable speed, reflecting well-optimized procedures and possibly automated systems for preliminary checks.
2. Query resolution: the most time-intensive segment of the process occurs between query resolution and claim approval, consuming approximately 2 hours and 47 minutes. This phase likely involves more detailed review of medical documentation, and potential negotiations between the hospital and insurer.
3. Final approval: once queries are resolved, the final approval is typically swift, indicating streamlined decision-making processes at the insurance company level.

- This efficient cycle not only enhances patient satisfaction by reducing wait times for claim resolution but also benefits healthcare providers by improving cash flow and reducing administrative burdens.

Table: 2 Average TAT of CGHS till admission process

Turn Around Time	Referal time to Intimation time	Intimation time to time of admission	Referal to time of admission
Average	00:11:10	00:43:51	00:55:02

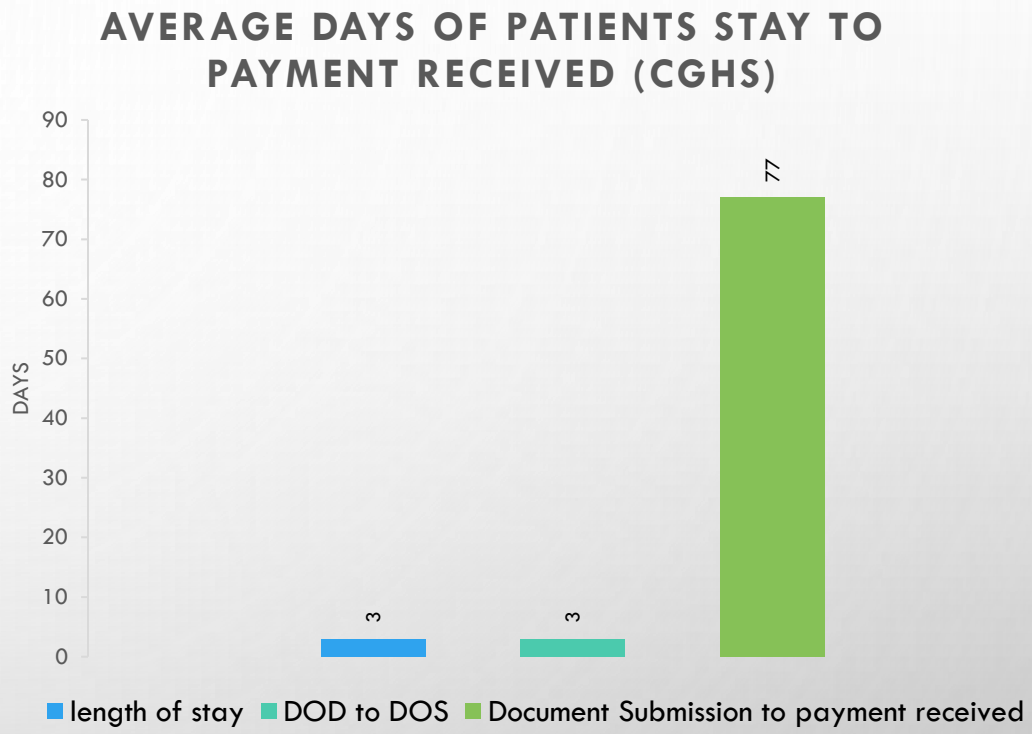


Interpretation:

Graph indicates that the Pre Admission Turn Around Time is less than 1 hour and starting from the time of referral to intimation which takes only 11 minutes for the subsequent admission process takes only 43 minutes, thus showing the competency in handling the CGHS beneficiaries.

Table 3 Average days of patients stay to payment received (CGHS)

Average	length of stay of CGHS patient	Date of Discharge to Date of document Submission	Document Submission to payment received
Days	3	3	77

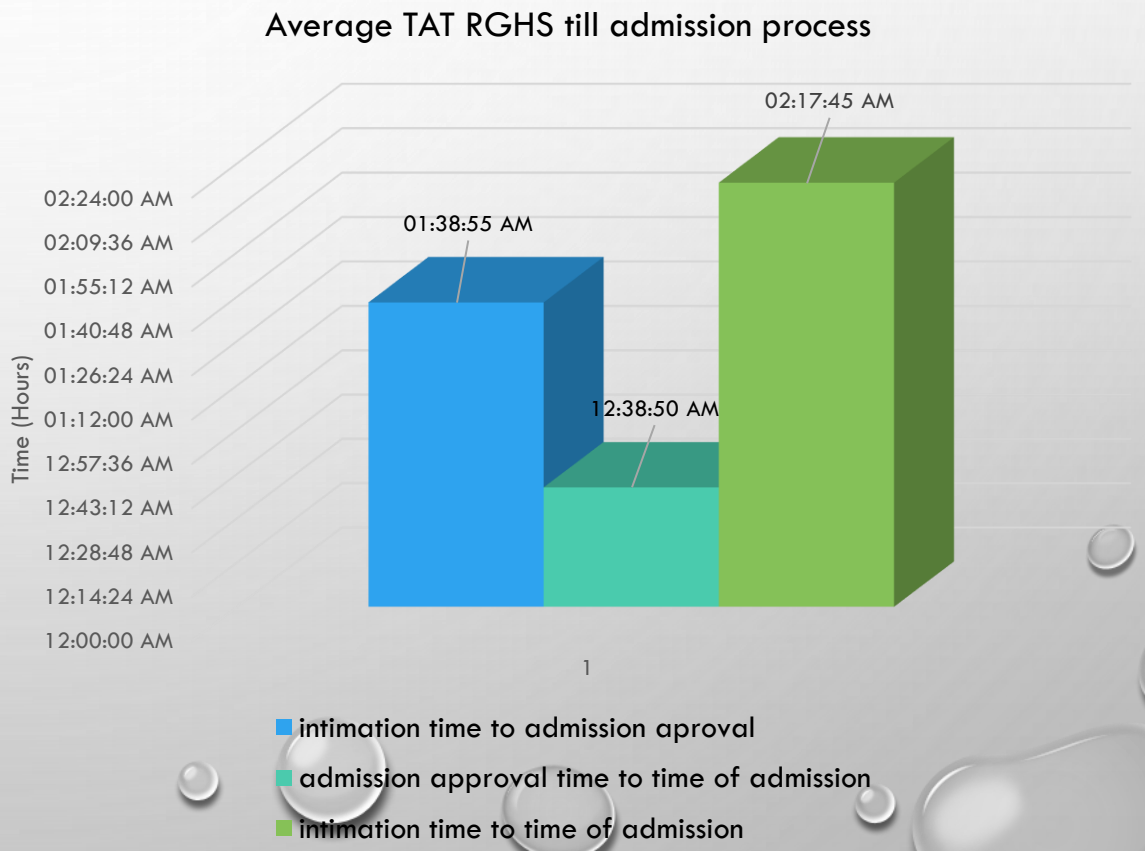


Interpretation

The graphs show that the pattern of treatment for the time of document submission from date of discharge is standardized but not fast treatment for 3-day duration. Thus, the time taken from submission of a document to receive of payment shows that there are serious problems with the reimbursement processes, which clearly demonstrate that this affects hospitals' cash flows and may, in turn, impact the provision of services.

Table: 4 Average TAT RGHS till admission process

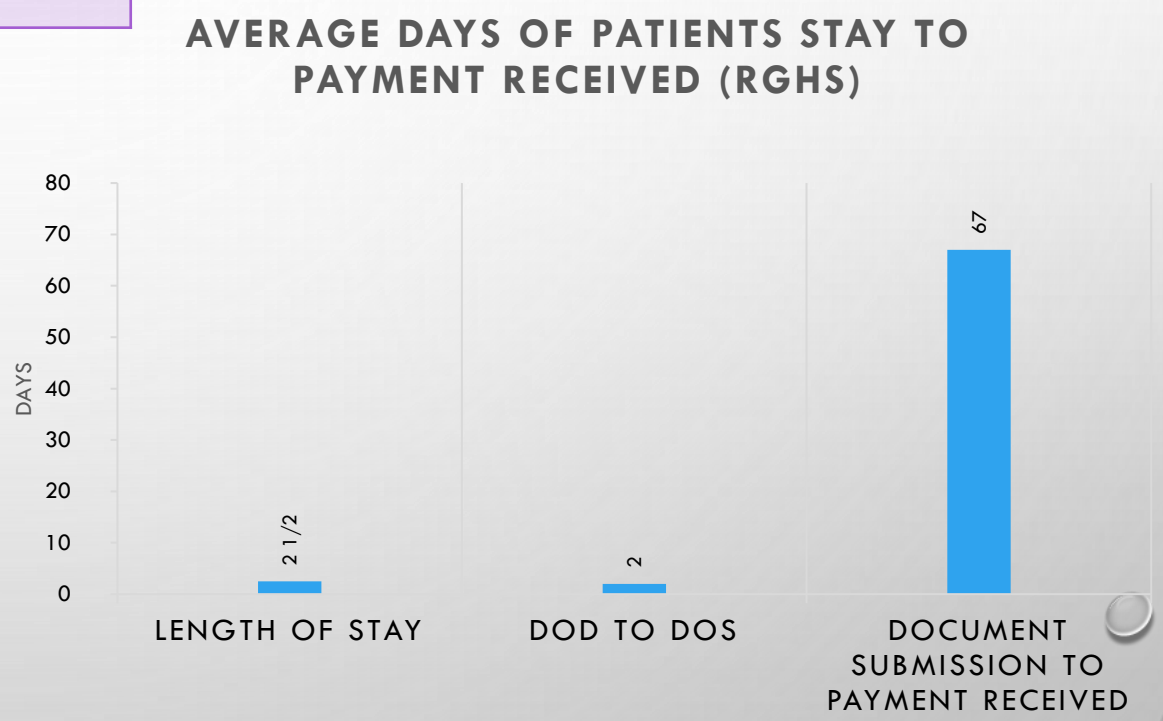
Turn Around Time Of RGHS Patient	Intimation time to admission aproval	Admission approval time to time of admission	Intimation time to time of admission
Average	*01:38:55*	**00:38:50**	***02:17:45***



Interpretation: Out of the total period taken from the time of intimation till the patient is admitted, the pre admission period for the RGHS patients is higher which averages to almost 2 hours and 18 minutes.
the graph represents the pre-admission turn around time averagetiate about two hours and eighteen minutes for RGHS patients from the time of intimation to the time of admission and it takes a longer time compared
to CGHS Patients

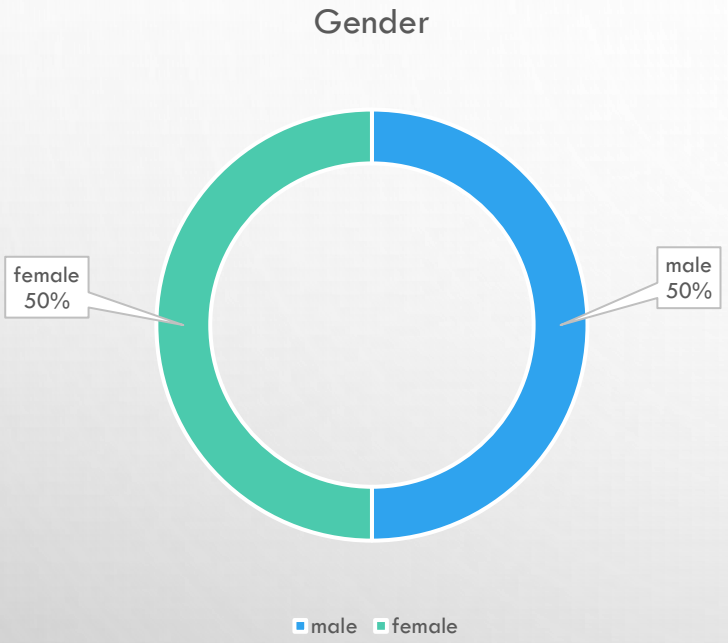
Table 5 Average days of patients stay to payment received (RGHS)

Average	length of stay of RGHS patient	Date of Discharge to Date of document Submission	Document Submission to payment received
Days	*2 1/2*	2	67

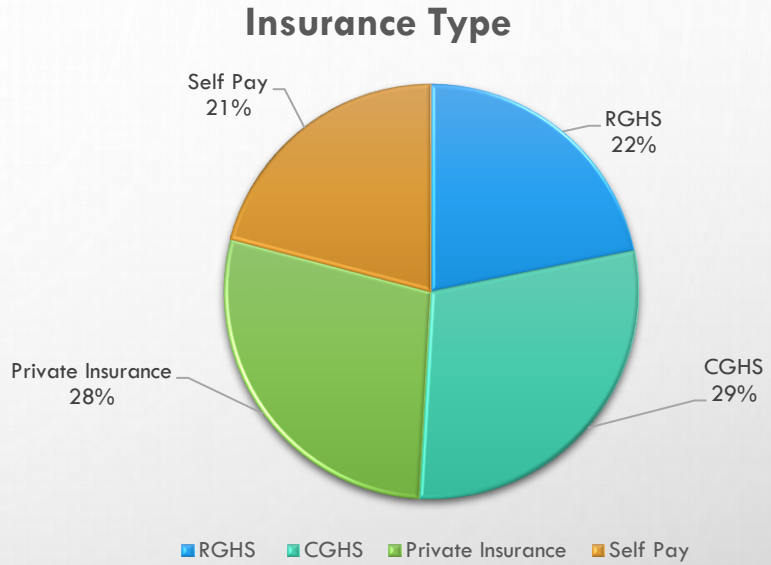


Interpretation: The above graph elucidates that concerning the document submission RGHS is slightly better with average duration of 2 days than that of CGHS having average of 3 days.
Payment Cycle is 67 days Thus, it is relatively long, though it is shorter than the CGHS payment period by ten days, pointing to slightly more efficient payment processe

(Patient satisfaction)



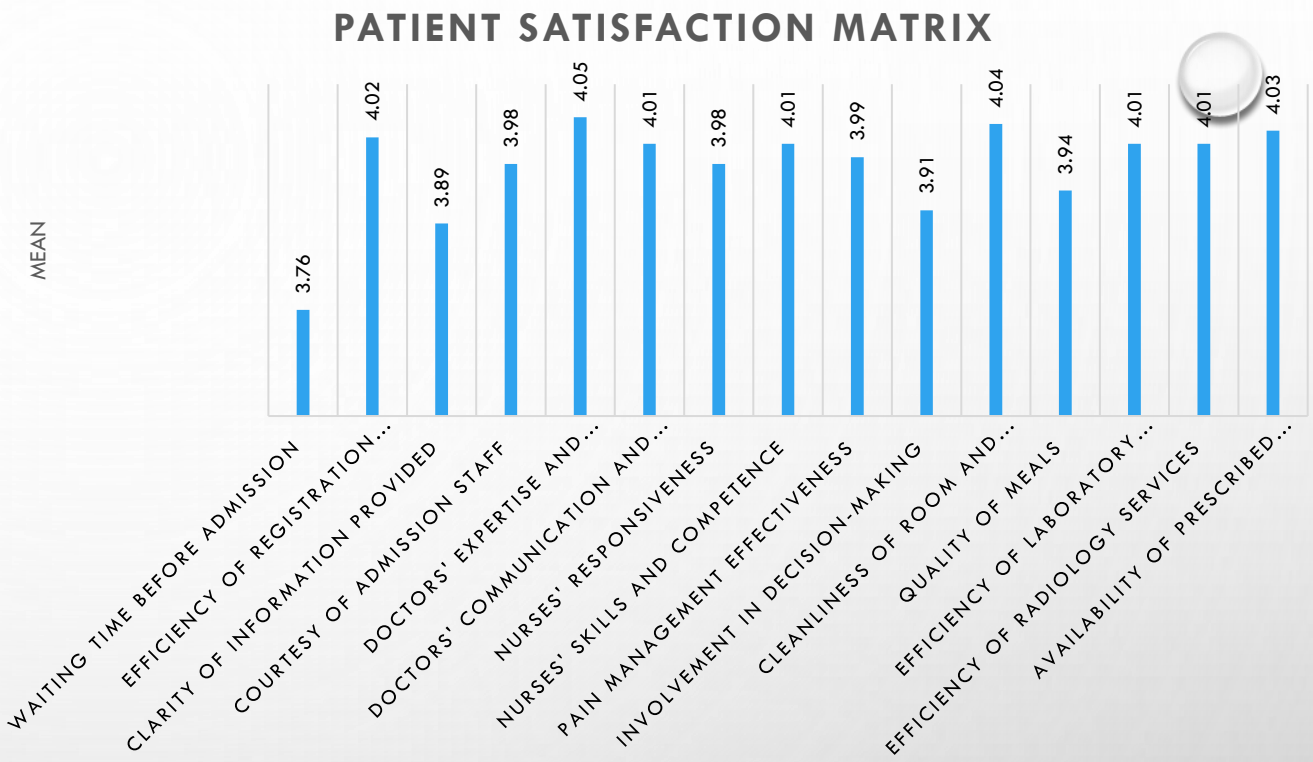
The distribution of the patient based on their gender was almost equal the hospital having a total of 55 males and 55 females



The distribution of patients has a fairly even split with regards to the different pay options, though more have paid through the government schemes (patients on RGHS and CGHS = 56). This diversity enables a good comparison between the various types of insurance.

Table: 6 Patient Satisfaction Matrix

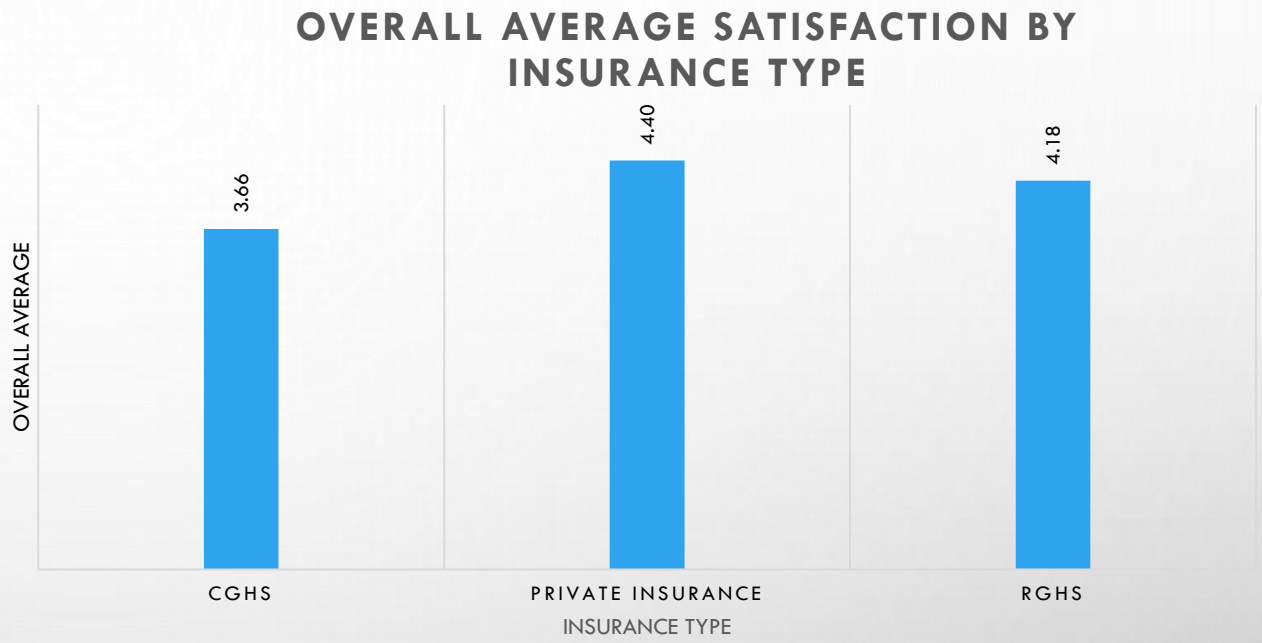
Satisfaction Metric	Mean
Waiting time before admission	3.76
Efficiency of registration process	4.02
Clarity of information provided	3.89
Courtesy of admission staff	3.98
Doctors' expertise and knowledge	4.05
Doctors' communication and explanation	4.01
Nurses' responsiveness	3.98
Nurses' skills and competence	4.01
Pain management effectiveness	3.99
Involvement in decision-making	3.91
Cleanliness of room and bathroom	4.04
Quality of meals	3.94
Efficiency of laboratory services	4.01
Efficiency of radiology services	4.01
Availability of prescribed medications	4.03



Interpretation: The majority of parameters are above the average, thus the survey could be characterized by rather high satisfaction rates. The scores are learnt to be high for doctors' expertise and room cleanliness with an average of 4.05 and 4.04 respectively. The general perception is the worst in waiting time before admission with a score of 3.76 out of 5 thus required improvement

Table: 4.26 Overall average satisfaction level by insurance type

Insurance Type	Overall Average
CGHS	3.66
Private Insurance	4.40
RGHS	4.18



Interpretation: Regarding the satisfaction level by Insurance type, Private insurance patients are much more satisfied than the RGHS and the CGHS patient is least satisfied among all the patients. This implies a need to enhance the experiences of patients who go for treatment under the various government schemes including the CGHS.

FINDINGS

- **Claim processing efficiency**:

- Private Insurance: very efficient with an average of (4 hours 13 minutes spent on the turn around).

- CGHS: short pre-admission time (55 minutes) but a considerably long payment time (77 days)

- RGHS: pre-admission time 2 hours and 17 minutes, payment cycle 67 days

- **Patient satisfaction:**

- Overall recommendation rate: 73.6% of the respondents are likely or highly likely to recommend the product.

- Satisfaction by insurance type: Private (4. 40/5) > RGHS (4. 18/5) > CGHS (3. 66/5)

- Age-related satisfaction: reduces with age, (20-35 years: 4. 2/5, 51-65 years: 3. 8/5)

- Highest satisfaction: hired doctors' experience (4. 05/5) and the cleanness of the room (4. 04/5)

- Areas for improvement: regarding waiting times the respondents scored as (3. 76/5) while information clarity received a score of (3. 89/5).

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- **Insurance-related experiences:**

- Only 20% said they faced problems with the acceptance of insurance.

- 75.5% percent of them described the insurance handling as good or excellent.

- RGHS/CGHS specific: 67. 9% of the respondents were not inhibited with the acceptance of cards.

- RGHS/CGHS specific: 62. 5% of respondents said that they got clear information about coverage

Correlation analysis between the efficiency of claim processing for different types of insurance (private, CGHS, RGHS) and patient satisfaction.

- **Private insurance**

  - claim processing: quickest and more effective.

  - Patient satisfaction: this is the highest satisfaction level achieved for the four constructs with a mean of 4.

  - Correlation: efficiency of insurance claims is associated with the efficiency of patient satisfaction, as patients seem to appreciate fast insurance claiming.

- **CGHS (central government health scheme)**

  - claim processing: slow and bureaucratic, with frequent delays.

  - Patient satisfaction: lowest satisfaction levels (mean = 3. 66).

  - Correlation: poor claim processing efficiency correlates with low patient satisfaction. Patients are frustrated with the slow and complicated processes, leading to a negative overall experience.

- **RGHS (state government health scheme)**

- Claim processing: moderate efficiency, with some delays and issues.

- Patient satisfaction: moderate satisfaction levels (mean = 4. 18).

- Correlation: average claim processing efficiency results in moderate patient satisfaction. While not as efficient as private insurance, RGHS performs better than CGHS, leading to relatively better patient experiences

REASON OF DELAY

Pre-admission processing for RGHS / CGHS

A) Complex eligibility verification: time-consuming processes to confirm patient eligibility under the scheme.

B) Documentation requirements: extensive paperwork needed for admission under government schemes.

Government scheme payment cycles (cghs: 77 days, rghs: 67 days)

a) Complex bureaucratic processes: multiple layers of approval and verification within government departments slow down the reimbursement process.

B) High volume of claims: government schemes often handle a large number of claims, which can create backlogs in processing.

Private insurance claim processing (efficient but takes 4 hours 13 minutes)

A) Query resolution: the time that has been spent in responding and solving the issues that insurance companies might have raised.

B) Verification processes: the time taken in the process of confirming all the details of the policy, authorities or limits of the policy and the details of the patient.

C) Variation in insurance company procedures: process of insurance handling and the compliance measures vary with different insurance service providers causes uneven processing.

Waiting times and information clarity (low satisfaction scores).

A) Complex insurance verification: the time doctors and other employees spend checking patients' insurance and getting the needed permission.

B) Incomplete pre-visit information: lack of documented and prepared patients whereby the patients arrive at the facilities without any form of preparedness, hence denying them access to the hospitals due to some stipulated requirements.

DISCUSSION

Literature review highlights

1. Patient satisfaction and healthcare efficiency:
    1. Patient views crucial for hospital image and service usage
    2. Efficient claim processing improves patient experience
    3. Technology (ehrs, billing systems) enhances operations and satisfaction
2. Insurance schemes:
    1. Private vs. Government schemes (CGHS and RGHS) differ in procedures
    2. Government schemes face longer processing times and bureaucracy
    3. Private insurance associated with higher satisfaction
3. Healthcare operation models:
    1. E improve data management efficiency
    2. Telehealth services reduce wait times
    3. Workflow automation optimizes claim processing

Where as findings shows

1. Claims processing efficiency:
    1. Private insurance: best performance (4 hours 13 minutes)
    2. CGHS: quick pre-admission (55 minutes), long payment time (77 days)
    3. RGHS: moderate efficiency (2 hours 17 minutes pre-admission, 67 days payment)

2. Patient satisfaction:
    1. Overall recommendation rate: 73.6%
    2. Highest satisfaction: private insurance (4.40/5)
    3. Satisfaction declines with age
    4. Areas for improvement: waiting times and information provision

3. Insurance-related experience:
    1. 20% faced insurance acceptance issues
    2. 75% rated insurance handling positively
    3. 62% reported RGHS/cghs-specific problems

CONCLUSION

The study therefore establishes a moderate to strong positive relationship between claim-processing efficiency outcomes and patients' satisfaction with the above-mentioned insurance covering private, CGHS and RGHS. Thus, the study shows that private health insurance consumers are the most satisfied with their insurance as it was proved by the results of the survey: they get their claims processed quicker and more efficiently. Patients with CGHS insurance on the other hand record the lowest satisfaction since their health claims take longer to be processed and the process entails a lot of formalities. Patients of RGHS are in the middle somewhere, therefore they have moderate level of satisfaction

Factors influencing patient satisfaction

1.Timely and accurate communication about claim status
2.Transparency in processes
3.Clear, understandable explanations to patients
4.Staff training in effective communication
5.Integration of technology in communication processes

SUGGESTIONS

• Claim processing

1. Communicate with patients regarding the status of their claims through regularly or periodical status through SMS or email or through an informatics application.

• For Improving satisfaction levels:

1. Enhance communication channels between hospital staff and patients
2. Offer clear, easy-to-understand explanations of insurance processes
3. Provide targeted care strategies for different age groups, especially older patients

• For improving performance:

1. Reduce waiting times for all services, particularly for government scheme patients
2. Invest in staff training to handle insurance-related queries more effectively
3. Utilize patient feedback to continuously refine hospital processes

THANK YOU