

TIME AND MOTION STUDY IN TPA

DEPARTMENT: AT MAX HOSPITAL

ABOUT THE ORGANISATION

Founded in the year 2007, Max Hospital, Gurugram is a leading hospital in Haryana. The 104+ bedded facility with a team of 290 doctors and 201 nursing staff has provided world class healthcare services to over 5 lakh patients. It is equipped with 16 ICU beds, 6 PICUs, 7 NICUs and 5 Cardiac Care beds. The hospital uses state-of-the-art technology, four high-end Operation Theatres, an NABL accredited Max Lab and NABH accreditation.

VISION

To be the most well-regarded healthcare provider in India, committed to the highest standards of clinical excellence and patient care, supported by latest technology and cutting-edge research.

High end machines and latest technologies
Entirely digitalised

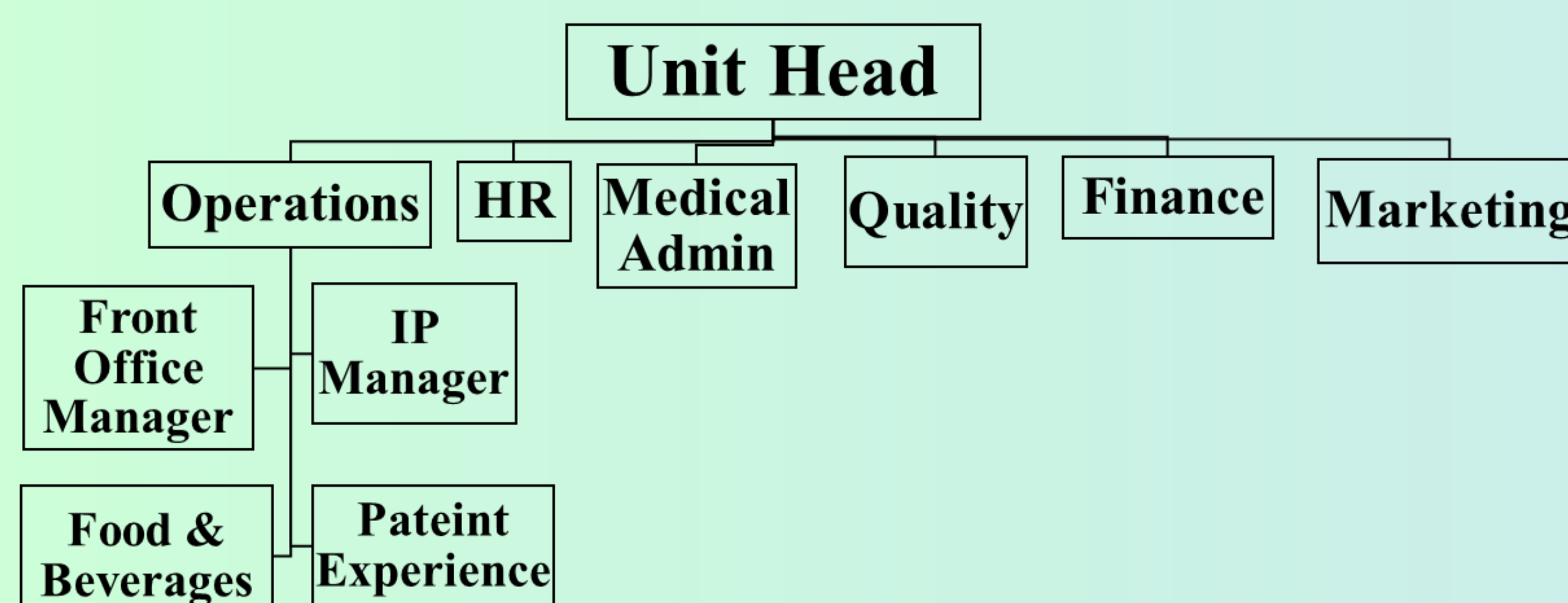
Limited number of beds
Not patient pocket friendly

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Expansion of services and facilities
Rising demand

High demand, less supply
Competitive market

ORGANISATIONAL STRUCTURE



OBJECTIVES

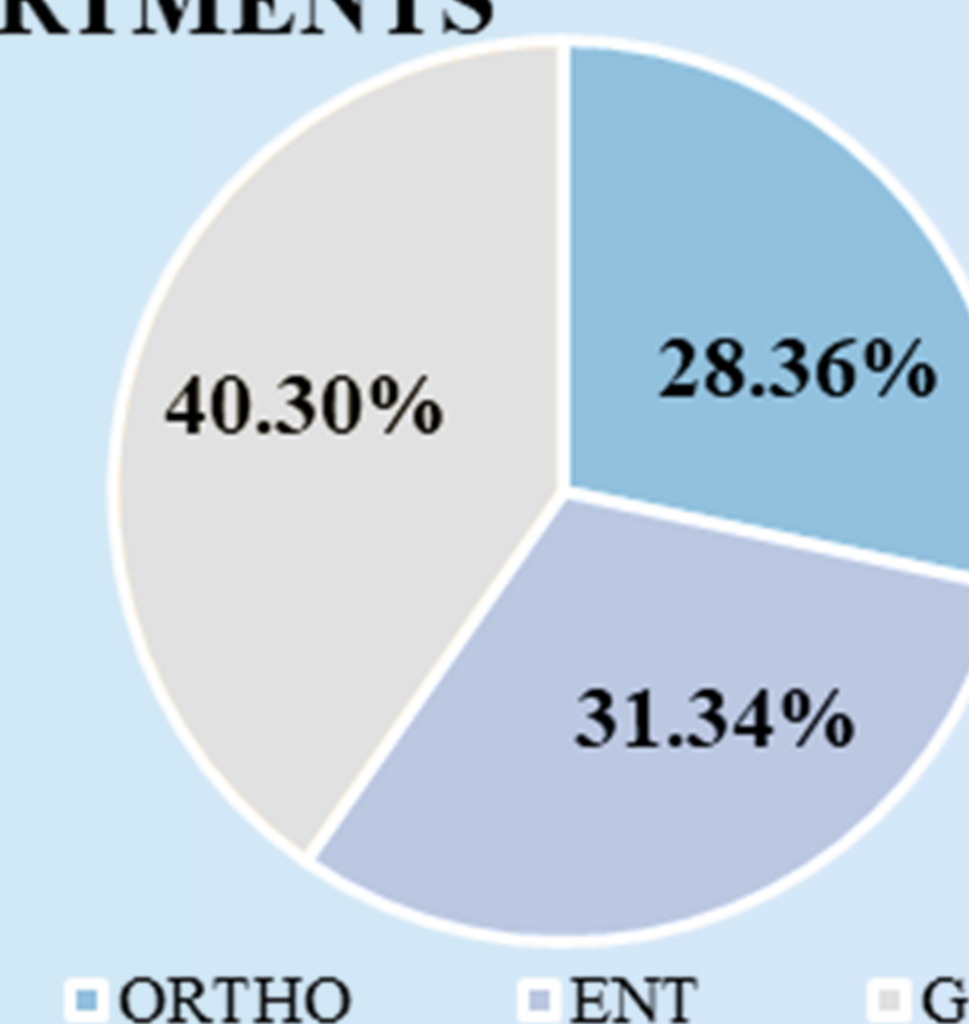
- To understand the process flow of TPA
- To evaluate average time taken at various stages of work
- To identify the main challenges faced by the department

METHODOLOGY

- Study setting: TPA department at Max Hospital, Gurugram
- Study Design: Retrospective observational study
- Method: Mixed method research
- Sampling Method: Purposive Sampling
- Sample: 67 patients admitted between June 9th, 2025 to July 6th, 2025 in the IPD of ENT, General Surgery and Orthopaedics department.
- Primary data collected through activity mapping and observation, secondary data collected from HIS and IHX
- Data analysis: Process mapping, average and Time and motion analysis

DISTRIBUTION OF PATIENTS

BASED ON DEPARTMENTS



CHALLENGES

- Delay in pre-authorization form completion.
- Incomplete documentation raises query.
- Obtaining documents from other departments maybe time taking.
- Lack of clarity amongst patients about policy coverage and what factors may lead to denials.

SUGGESTIONS

- Counselling the patient properly about their policy.
- Checklist of documents to avoid incomplete documentation.
- Proper communication to avoid confusion.
- Integrating AI in system to automate data processing
- Proper follow up with cases.
- Monitor performances of staff to enhance delivery time.

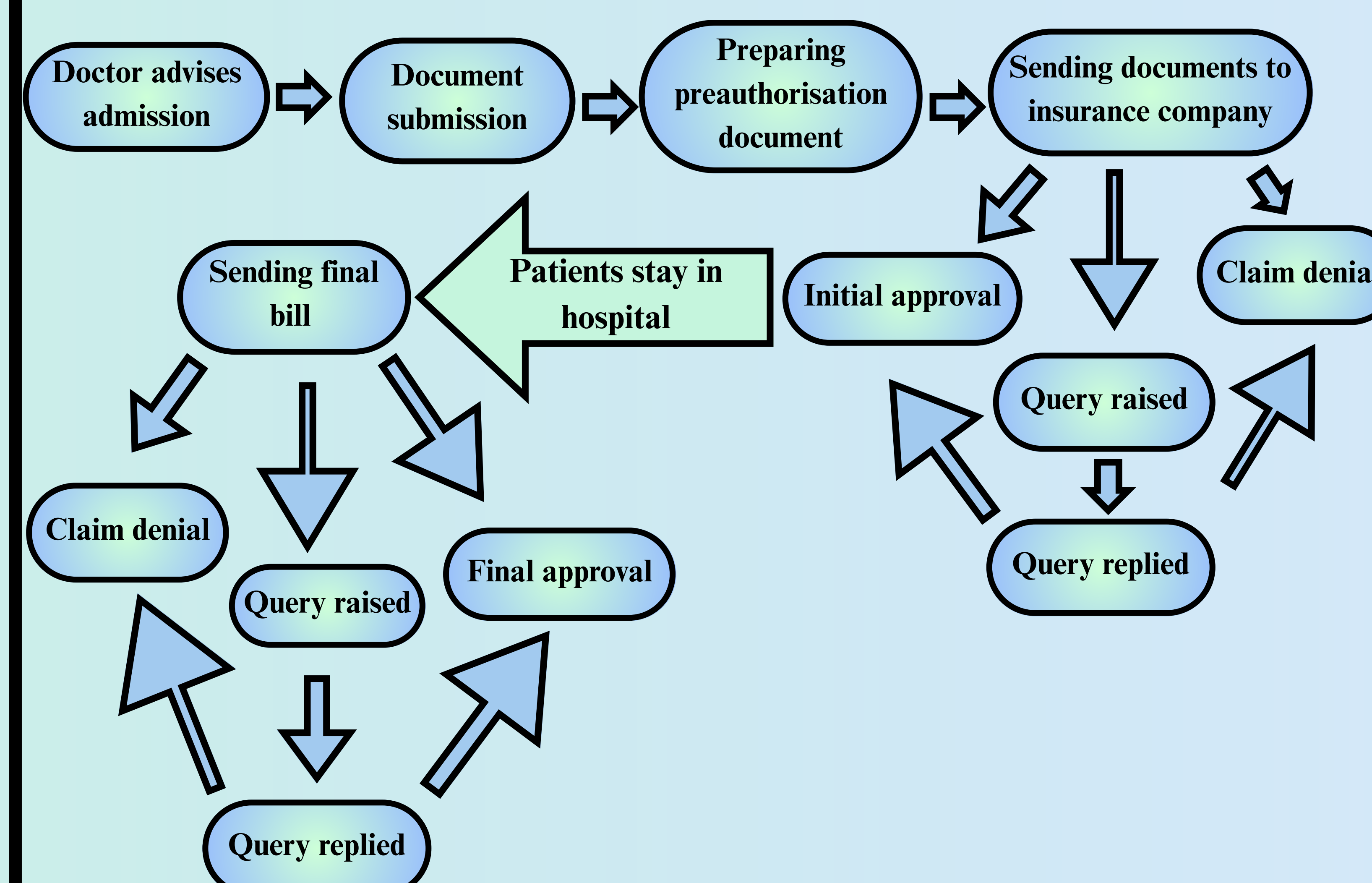
TIME V/S MOTION CHART

Activity	Start Time	Time Taken	End Time
Sending initial documents to	0 Hr 0 Min 0 Sec	10 Hrs 16 Mins 46	10 Hrs 16 Mins 46 Secs
Query raised	10 Hrs 16 Mins 46 Secs	47 Mins 58 Secs	11 Hrs 04 Mins 44 Secs
Query replied	11 Hrs 04 Mins 44 Secs	22 Hrs 30 Mins	33 Hrs 34 Mins 44 Secs
Initial approval	33 Hrs 34 Mins 44 Secs	02 Hrs 34 Mins 22	36 Hrs 09 Mins 06 Secs

Patients stay in the hospital

Activity	Start Time	Time Taken	End Time
Sending final bill to insurance	0 Hr 0 Mins 0 Secs	21 Mins 0 Secs	21 Mins 0 Secs
Query raised	21 Mins 0 Secs	13 Mins 08 Secs	34 Mins 08 Secs
Query replied	34 Mins 08 Secs	07 Mins 40 Secs	41 Mins 48 Secs
Final approval	41 Mins 48 Secs	01 Hrs 50 Mins 37 Secs	02 Hrs 32 Mins 25 Secs

PROCESS MAPPING



CONCLUSION

- For planned admissions initial approval processing can take up to 3 days whereas the final approval at the time of discharge can be obtained in approximately two to three hours
- Query reply on intial claim takes the maximum amount of time.
- There is a significant difference in the mean time for query reply on intial claim of the patients in the three departments with maximum time taken in orthopaedic department and lowest in general surgery.

KEY LEARNINGS

- In depth understanding of work done in TPA department and its contribution in optimizing the efficiency of hospital
- Proper counseling of the patient is a necessity to maintain the trust and avoid confusion.
- Reverting back to insurance queries, obtaining approval and handling denials