Summer Training
At

Rajiv Gandhi Cancer Institute & Research Center

From Date (05.04.2022) to (20.06.2022)

MBA Hospital and Health Management 2020-2022

A Report by

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Under the guidance of

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About the organization

- Name: Rajiv Gandhi Cancer Institute and Research Centre
- Type: “Not for Profit”, Hospital.
- Established in 1996
- Branches: Rohini west & Niti Bagh
- Capacity: 500 beds with 51 Bedded surgical ICU, 21 bedded Medical ICU and 22 bedded Bone Marrow Transplant

VISION , MISSION AND VALUES

- **VISION**

  To Provide Affordable Oncological Care Of International Standard And Help To Eliminate Cancer From India Through Research, Education, Prevention & Patient Care.

- **MISSION**

  To be the premier cancer care provider in India and be the preferred choice of Patients, Care Givers, Faculty and Students
  By Offering comprehensive services at an affordable price
  And excellence of our personnel leveraging best technology

- **VALUES**

  We hold our patients in high esteem and work with ethics and compassion
  We care and function with mutual respect, trust and transparency
  We deliver accurate diagnosis, correct advice and effective treatment.

About the Study:

- **Project: Turnaround Time for Out Patient & Radiology Department and Associated Factors: A Descriptive study at Rajiv Gandhi Cancer Institute and Research Centre, Rohini, New Delhi**

  Methodology
- **Study Area:** OPD & Radiology Department at Rajiv Gandhi Cancer Institute & Research center, Rohini, New Delhi
- **Study Type:** It was Observational cross sectional descriptive study
- **Study Population Inclusion criteria**- person who have visited the Radiology department & OPD either for consultation, follow-ups etc.
- **Exclusion criteria**- persons visiting other Departments of the hospital except for the concerned departments.
- **Tools for Data Collection:** Check-list and MS-excel
- **Sample Size**-100 persons who visited Radiology Department and OPD of Rajiv Gandhi Cancer Institute and Research Centre at the time of study.
- **Sampling Technique**- Systematic Random Sampling

OBJECTIVE

- To assess the average time taken at each steps in OPD(time motion study)
- To assess the average time taken at each steps in Radiology Department(Time motion study)
- To perform the gap analysis of both the departments to know the factors associated with Turnaround time

About the Department of radiology

Department of radiology has :-

- 1 CT machine
- 1 MRI machine
- 2 functional USG machine
- 1 portable USG under repair
- 1 non functional USG machine
- 2 portable Xray machine
- 1 mammography machine
- 1 Fluro machine in the Cath lab

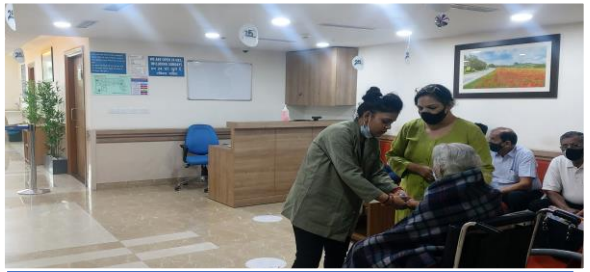
Floor wise distribution of Department of Radiology at RGCIRC

GROUND FLOOR

- CT scan
- CT guided biopsy
- CT guided FNAC
- X rays

FIRST FLOOR

- USG
- Intervention Radiology



SECOND FLOOR

- MRI

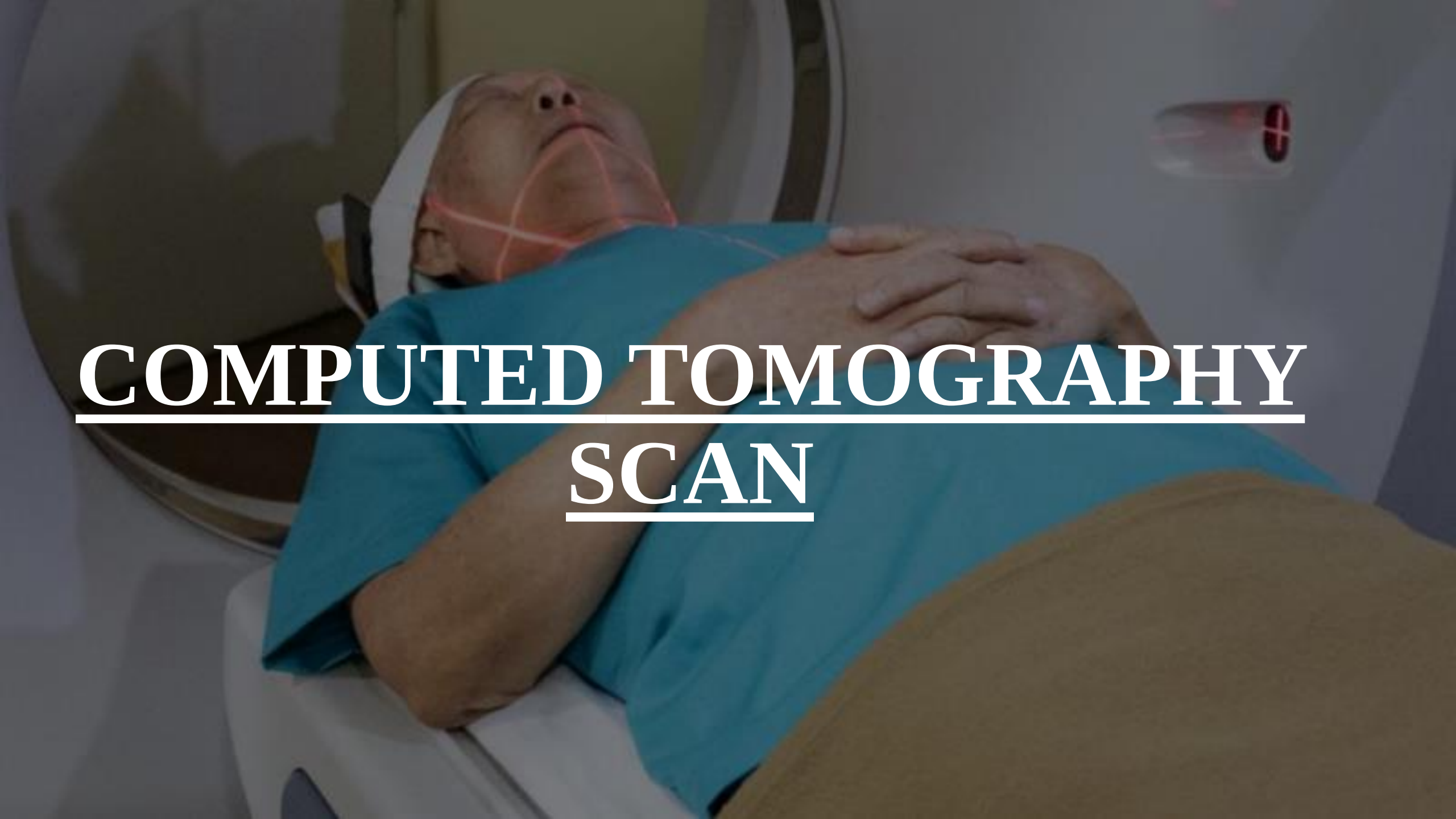
Sample Size

- Using a convenient sampling technique, a total of 112 patients were selected for the time motion study.
- Secondary data was collected for the purpose of analysis.

Process	No. of cases
CT scan	24
Mammography	5
X ray	19
USG	33
MRI	31
Total	112

Methodology

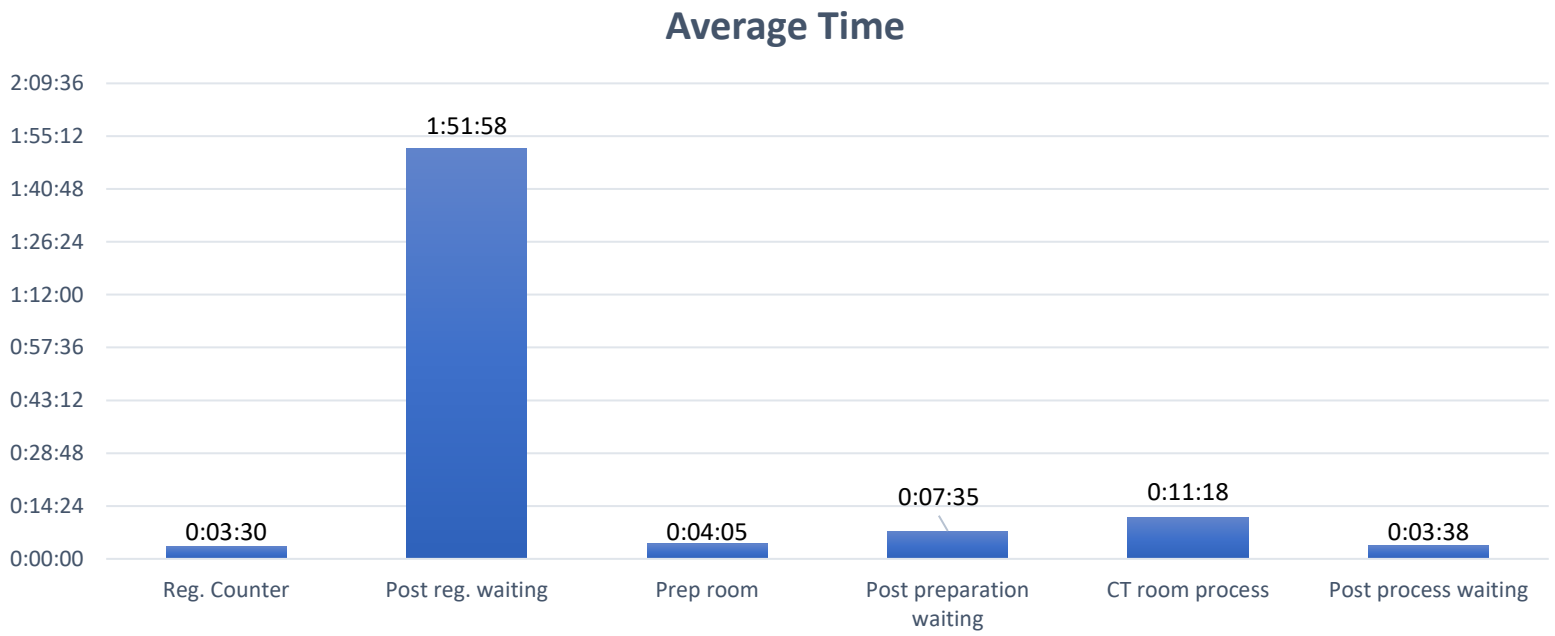
- Using a convenient sampling technique, 112 patients were selected for the time–motion study (TMS).
- Then they were accompanied using checklist to collect data on their motion through out the process of Radiological investigation at different levels.
- Once the process of investigation is done the reporting time of the investigations and their dispatch from the department is noted.
- Data entry and analysis were done using Microsoft Excel 2010.
- Percentages and proportions were calculated for descriptive statistics.
- Time was noted with the help of a digital watch and detected at each station by an observer with the help of the same watch.
- The time difference was calculated and analyzed for every station.



COMPUTED TOMOGRAPHY SCAN

PROCESS OF CT SCAN

Registration counter → preparation room → CT room → preparation room → Exit



- Possible reason for long waiting time:- improper scheduling of tedious processes such as CT and CT guided biopsy.
- Patient does not come empty stomach and hence has to wait.

Average time taken in reporting and dispatch of CT scan

Process Name	Average Time
Report Approval (level 1)	19:00:15 (1:39 to 28:27)
Report Validation (level 2)	22:24:35 (7:20 to 44:17)
Report Dispatch	20:35:32 (2:32 to 45:02)

- Average time taken between Approval to Validation of CT scan is 3 hours 25 min

MAMMOGRAPHY SCAN

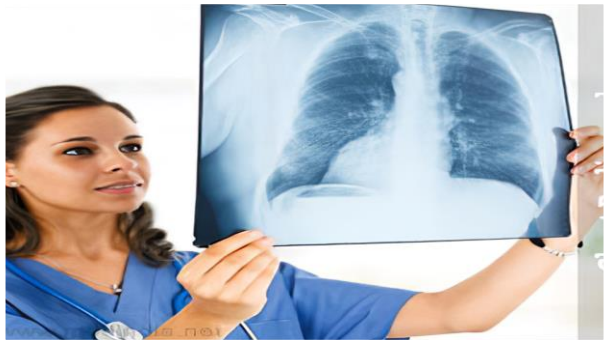
Process of Mammography

Registration counter → Mammography room → Exit

PROCESSES	AVERAGE TIME(hh:mm:ss)
Reg. Counter	0:06:00
Waiting	0:23:36
Process	0:05:24
Waiting	0:02
TAT	0:38:00
Approval	7:17:00
Validation	7:29:12
Film dispatch	1:59:24

X-RAY

PROCESS OF XRAY



Registration counter → X RAY room → Waiting area → Exit

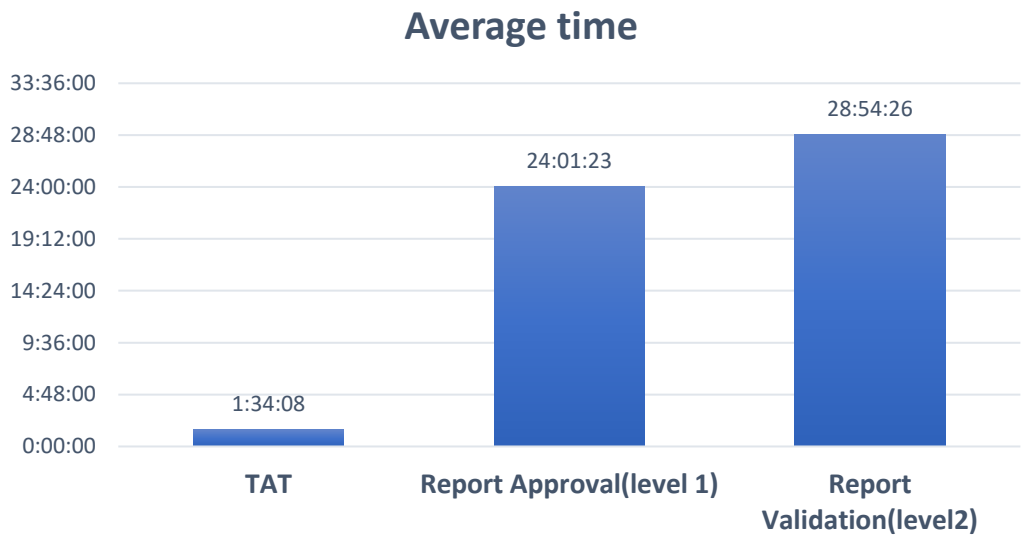
Processes	Average time
Reg. counter	0:01:41
Waiting	0:03:09
X ray room	0:03:57
Film dispatch	0:54:51
TAT	1:03:38

- Average time taken between process and dispatch of Xray film is 54 min indicating a flaw in dispatch of X ray films and requirement to decentralize the dispatch counter.

MAGNETIC RESONANCE IMAGING (MRI)

Process of MRI

Registration Counter → Preparation Room → MRI process → Exit

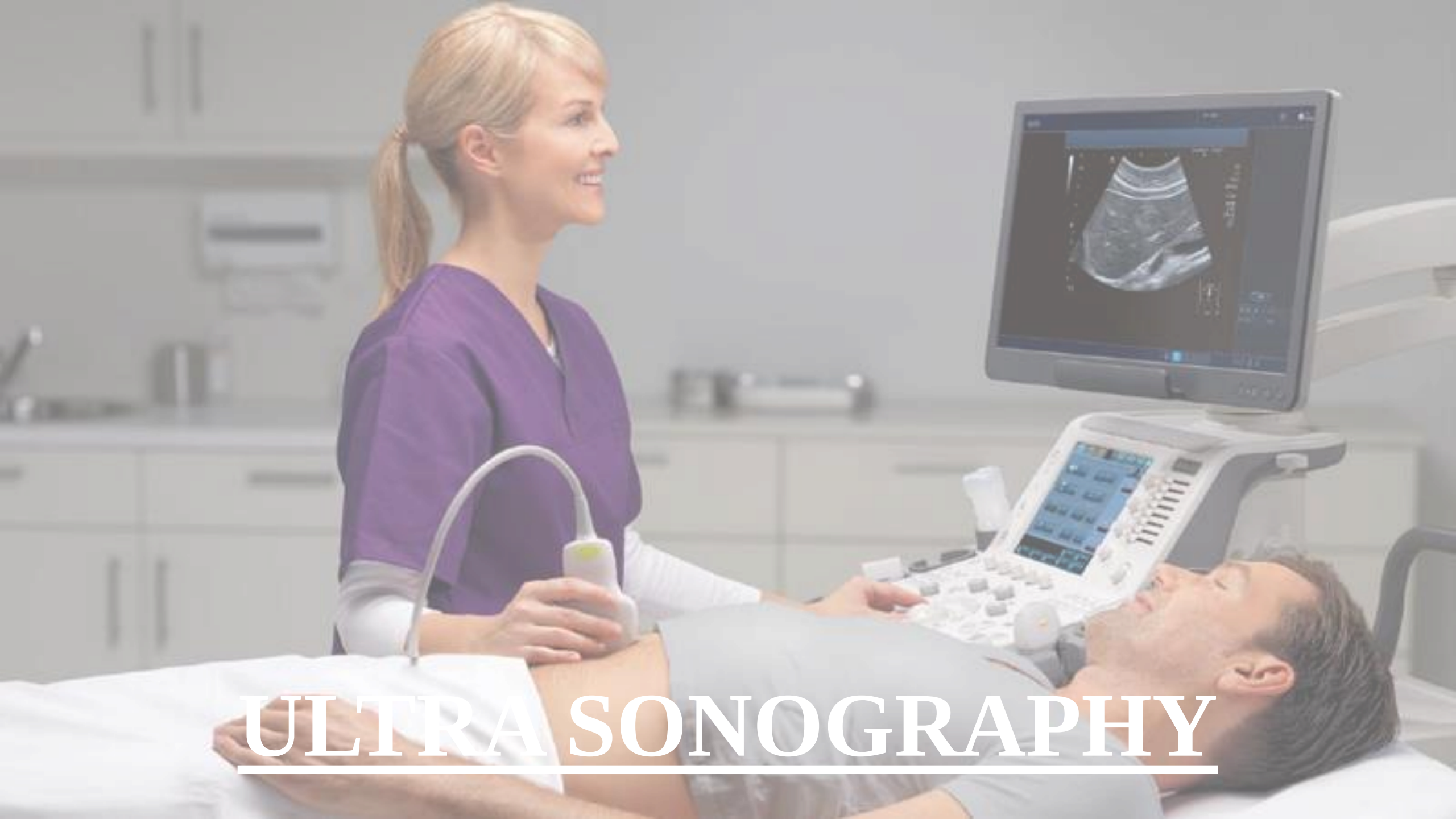


- Time taken between approval (level1) and validation(level2) is 4 hour 53min.
- Average time taken for validation of an MRI after the process is done is clearly more than 24 hours indicating a delay in dispatch of reports.

Reporting of MRI

Report Validation with in 24 hours	Number of reports
YES	15
NO	17

ONLY 47% Patients receive reports within 24 hours.
Possible reason for delay might be high patient flow, less doctors in department to approve and validate the MRI, complicated case.



ULTRA SONOGRAPHY

Process of USG

Registration counter → USG room → EXIT

PROCESSES	AVERAGE TIME
Reg.Desk	0:00:49
Waiting time before USG	0:55
USG Process	0:21:53
Waiting time after USG	0:05:35
Validation of USG	8:45:27
TAT	**1:24:38**

Long waiting time prior to the process of USG is observed , probable reason for this could be:-

- Shortage of radiologist to perform the process of USG(only 1 radiologist is seen posted).
- Patient foot fall is more.

CHALLENGES

CT /MAMMOGRAPHY/X-RAY

- Shortage of doctors hence the existing radiologists are multi tasking with various processes.
- Nursing staff is not dedicated towards the patients
- Staff at the counter aren't following the required behavioral work ethics.
- No proper signages to show the direction for PET-CT.
- Missing reports due to tedious dispatch process.
- There is no list of instructions provided to the patient before coming for the procedure(e.g. fasting).
- Poor scheduling of various process such as biopsy guided CT and routine CT which are taken up in between the lengthy procedures.

MRI

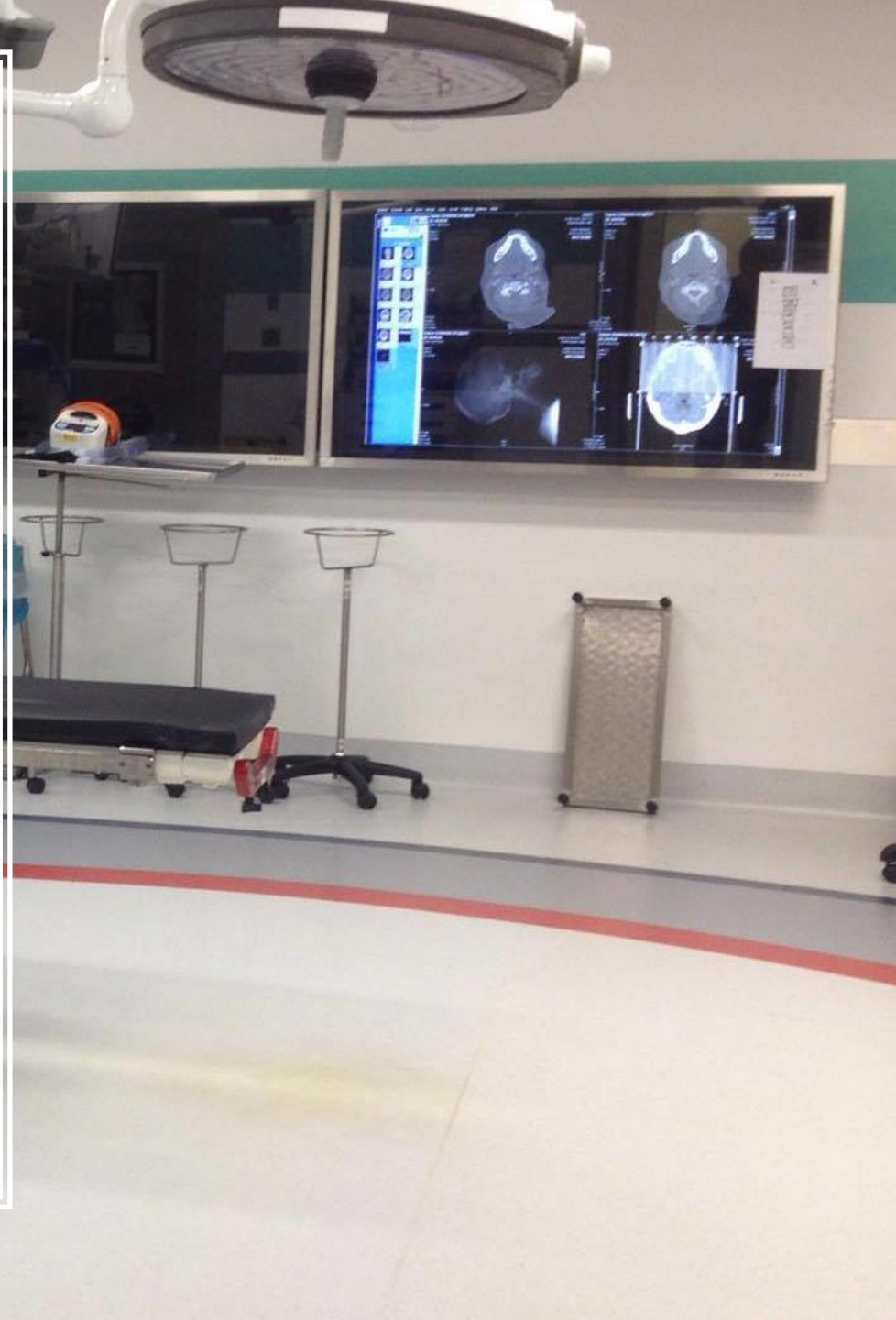
- Shortage of radiologists for approval/reporting of MRI.
- Poor appointment scheduling system (no appointments given on Sundays)
- Delayed reporting's Of MRI.
- Usage of regional languages by the technician a matter of discomfort for patient.

USG

- Doctors are overloaded with work and hence are seen doing over time.
- Long waiting time due to high patient load.
- Report collection time of 24hrs is too long for USG as many other diagnostic centers provide the USG report with in 30 min.

observations

- The staff on the ground floor is not patient friendly and at times seen arguing with the patients.
- Nonprofessional behavior of the staff at registration counter on the ground floor.
- Patient made to wait long hours without proper information especially with respect to dispatch of x rays.
- There is no TO DO list or instructions provided to the patient before the procedure.
- Patients who need to undergo routine CT are made to wait long hours and are taken up in between the lengthy processes.
- Staff is seen communicating in regional language which at times could be disturbing to the patient.
- Doctors are seen multitasking between reporting , clinical processes such as biopsy and many other tasks.
- A few doctors are posted in Niti Bagh campus which further overloads the existing doctors.

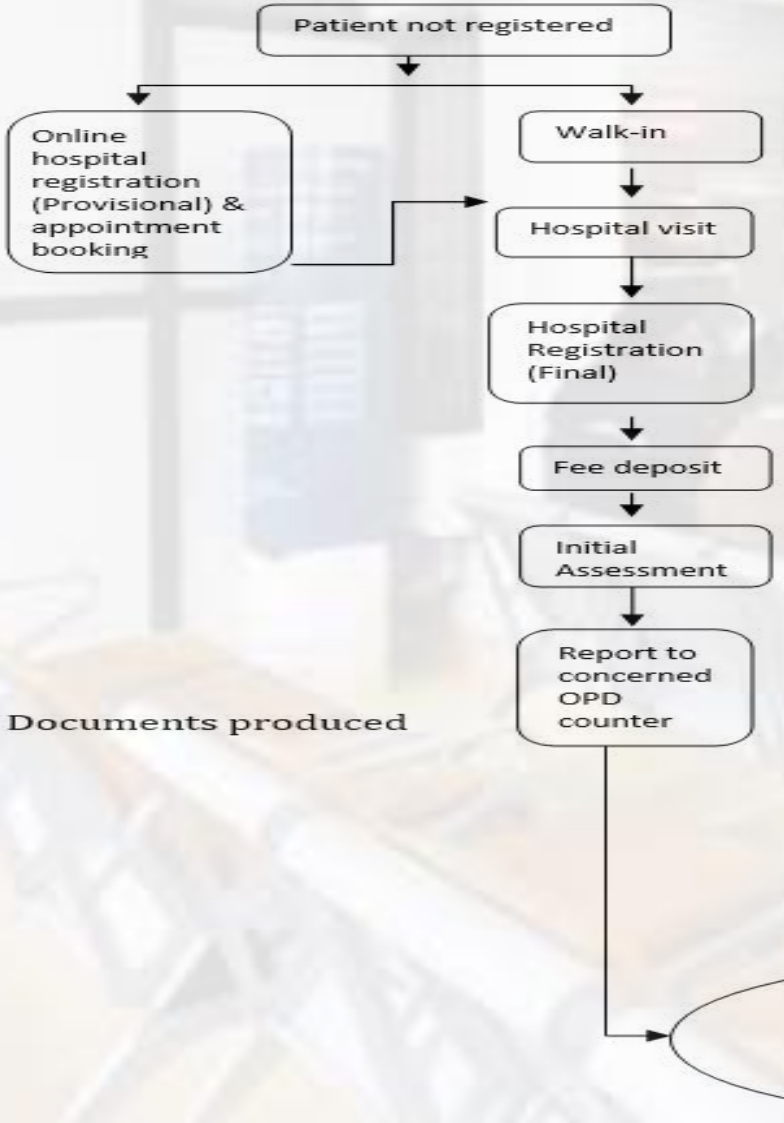


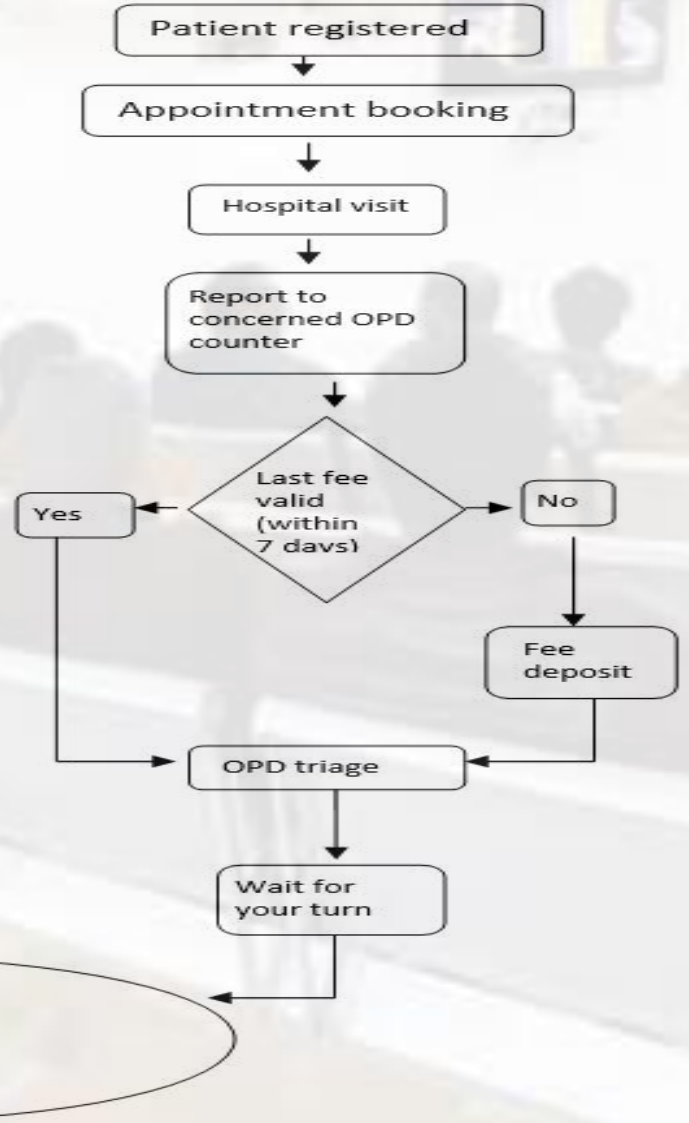
SUGGESTIONS

- Recruitment of radiologist to reduce workload.
- Requirement of a medical transcriptionist to help radiologist type the reports.
- Decentralization of dispatch counter is required.
- Sunday should be functional for the convenience of working and for out of station patients.
- There should be a separate missing report desk for the convenience of patients.
- Staff should be trained well to improve on behavioral work ethics.
- Drinking water should be visible to everyone as it is at the backside of the waiting area.
- There should be a proper signage for PETCT which is visible to everyone.

OPD(Out Patient Department) At RGCI&RC

PROCESS FLOW





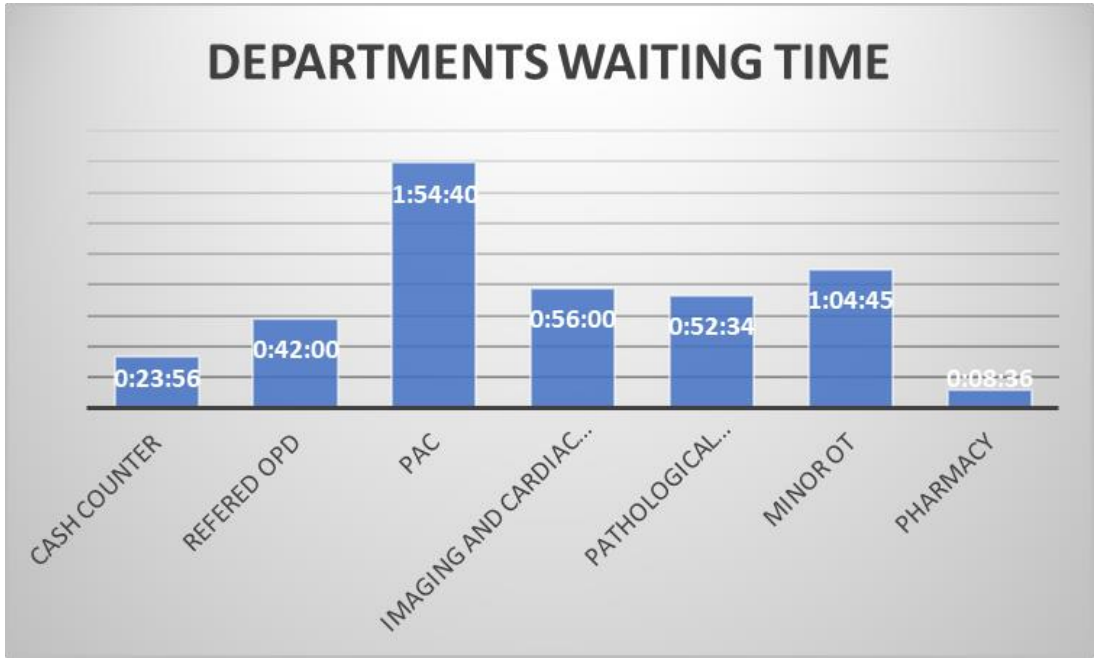
- **(TILL CONSULTATION)**

PROCESS	WAITING TIME
REGISTRATION	0:09:39
IAU	0:09:42
OPD COUNTER	0:02:49
CONSULTATION	0:36:45

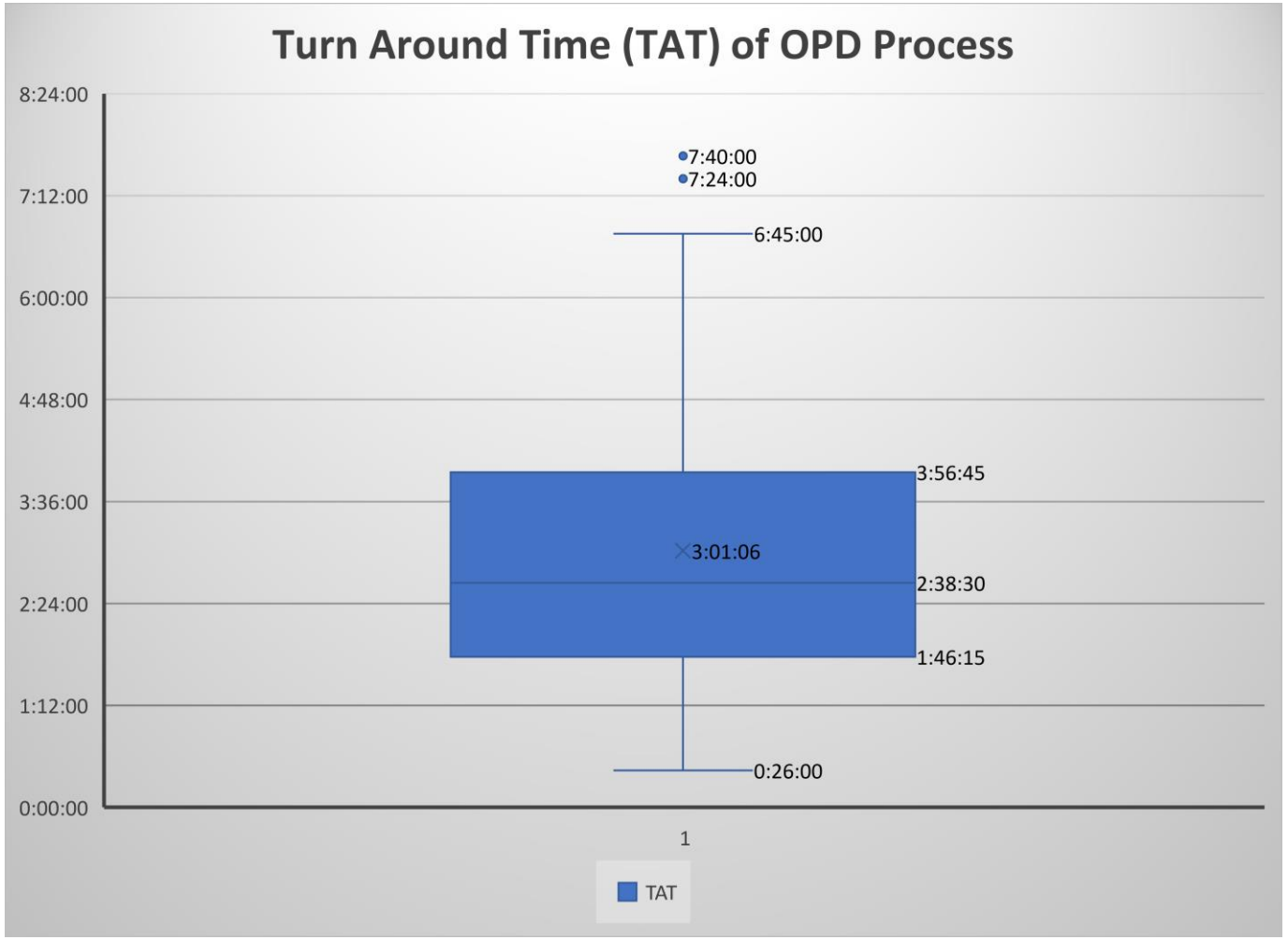
Waiting Time in OPD

PROCESS	WAITING TIME
REGISTRATION	0:09:39
IAU	0:09:42
OPD COUNTER	0:02:49
CONSULTATION	0:36:45

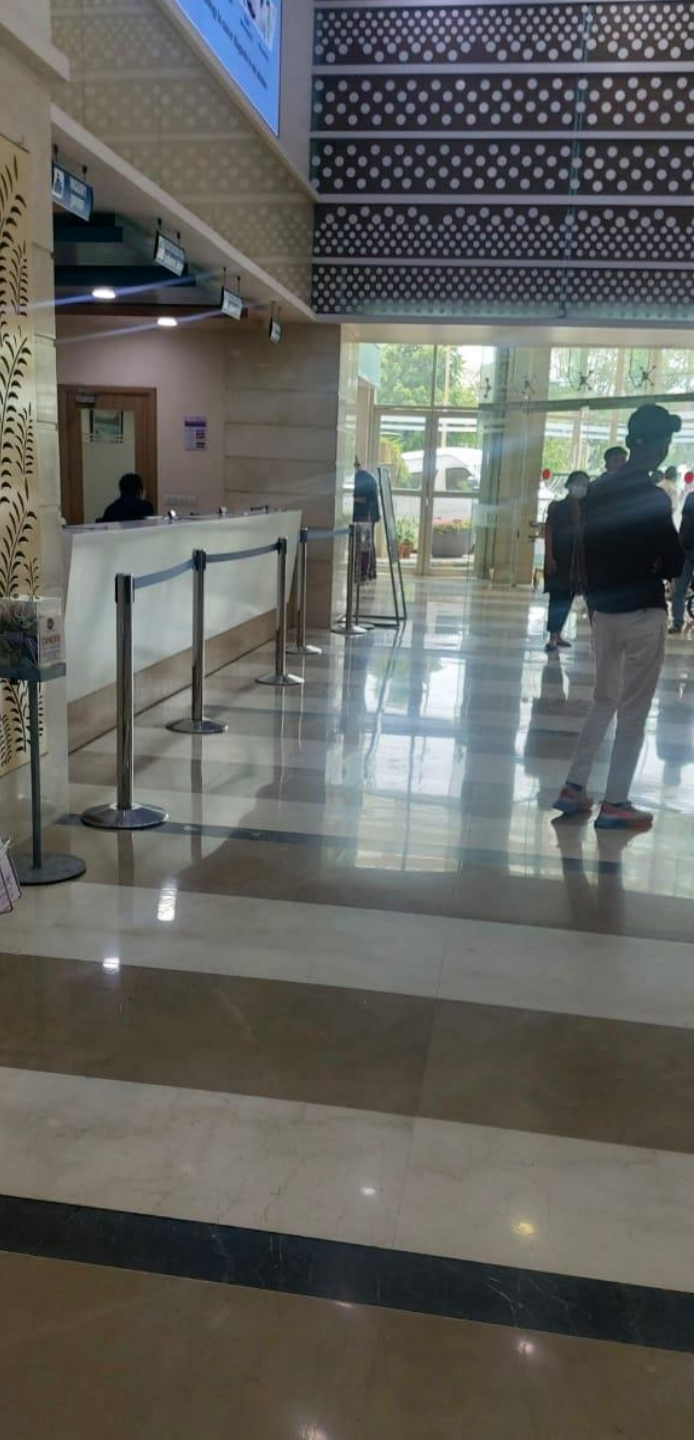
DEPARTEMENT WISE WAITING TIME (AFTER CONSULTATION)



TURN AROUND TIME



Average- 3hrs:1min:6se



CHALLENGES

HOSPITAL AMBIENCE

● Sanitization protocol is not being followed at the entrance appropriately

HELP DESK

● Help desk not visible
● Lack of manpower at the help desk- There are only 2 people at the help desk which are not sufficient when the patient load is more.
● Less number of help desk at the premise

REGISTRATION AREA

● Registration process is time consuming & the patients are made to wait at the OPD waiting area & then called once the file is ready
● The scanning process of documents is slow & at times the IT service crashes due to heavy load
● There is no provision for cost estimation for patients prior to treatment
● Patients find difficulty in reaching to referred OPDs due to inadequate signages & less manpower for guidance (GDA staff)

CHALLENGES

SERVICES

- Inappropriate staff training

- Staff at the counter are not aware of the Portal (PARAS) & App (RGCI-RC CARE APP)
- The staff is not empathetic towards the patient as they are meant to be specially with cancer patients

OPD AREA

- Display for token number isn't working half of the time due to technical issues & staff incompetency

- The system for calling names of the patient for OPD is inaudible in case of high patient load
- Long waiting hours at the OPD for consultation

- Patient is not informed at the earliest regarding the Doctor's absence & are made to wait for long hours & at times the whole day

- As the Doctor in the Cardiology department is on call basis so the waiting time is more for ECG, EBUS & 2D-Echo.

Recommendations

- Signages should be incorporated such that they are easily understood & clearly visible
- The mapping system which already exist needs to be simplified and implemented by the ground staff.
- Temperature at each floor should be modulated accordingly keeping in mind the patient's condition.
- More emphasis should be given on staff training for better understanding of Hospital Portal and App system and for improvement of there behavior towards the patients.
- Enhancement of manpower for patient's navigation and enquiry.
- Cases of fall had been observed on the escalators on the ground floor hence proper signages for other options such as elevator and stairs should be incorporated.
- Improvement of announcement System.
- Improvement in IT system

Recommendations

- Segregation of hours during the day for appointment patients and walk-in patients for consultation
- Cost estimation should be provided to the patients post consultation.
- Processes such as registration should be done in online mode as well to reduce patient waiting time.
- Strict rules and regulations on number of attendants accompanying the patients to reduce overcrowding hence improving the general aura of the hospital.
- There should be a separate counter from where patient can avail wheelchair services.
- Proper drinking water & sitting facilities should be there in front of the registration counter.
- Provision of availing sim card facility should be provided to international patients.

CONCLUSION

- In this study our objective is to find out the turn-around-time for the various processes of Radiology department and out-patient department & the challenges faced by the patients during the processes. By the end of the study, I concluded that maximum waiting time calculated is for Consultation(36mins:45secs) & minimum is at the OPD(2mins:49secs) which are common for all the patients. After consultation, once the patient is referred to their respective department, the maximum waiting time observed is for PAC(1hr:54mins:40secs). As fewer number of patients visited this department comparatively, so this is the Outlier according to the study. In radiology department Average time taken between report approval to validation and total TAT are common for all the patients.

- To improve the TAT policies should be formed and implemented and audits should be conducted at regular intervals of time which will not help in patient satisfaction but will also help in reducing the length of stay of patient and fasten the discharge process as well in the hospital

Thank you!