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A STUDY ON TURNAROUND TIME IN RADIOLOGY DEPARTMENT FOR PATIENTS ADVISED FOR X RAY, USG, MRI AND CT SCAN IN SHALBY MULTISPECIALITY HOSPITAL (Jaipur)

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TAT (Turn Around Time)

TAT (Turn around Time) This study was calculated from the time of patient registration till the time of report generation

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OVERVIEW

WORRYING QUESTIONS FOR ALL PATIENTS WHEN VISITING THE HOSPITAL HAS ALWAYS BEEN.....

"How long will I have to wait for my turn

AND

"How long will it take to get my Report?"

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1. Mission: "Leveraging global leadership in Joint replacement to establish multi-specialty care across geographies."
2. Vision:"Exceeding expectation from health."

AIMS AND OBJECTIVE

The study aims at improving the quality of imaging services. The objectives of the study are:

- To understand the reporting process flow of the Radiology Department.
- To calculate the TAT of reports for OPD and IPD patients after the patient goes for scan in the Radiology Department .
- To identify the reasons for a delay in reporting if any.
- To suggest the measures to improve the turnaround time of reporting.

THE CURRENT STIPULATED TAT IN SHALBY MULTISPECIALITY HOSPITAL

INVESTIGATIONS	STIPULATED TIME
X RAY	2 HOURS
USG	2 HOURS
CT SCAN	2 HOURS
MRI	3 HOURS

X RAY
MRI: Magnetic Resonance Imaging
CT: Computed tomography
USG: Ultrasonography

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METHODOLOGY

- All Data were collected directly from patients
- All the observed data were entered in Microsoft Excel

METHODOLOGY

- **Study Design:** Cross sectional study
- **Study Location:** Shalby Multispecialty Hospital, Jaipur
- **Sampling Method:** Observation method
- **Study Period:** 3 months
- **Sample Size:** The sample size for conducting survey is around 240 patients in total, 60 Patients of CT scan, 60 patients of USG, 60 patients MRI and 60 patients of X RAY, Observing whole in and out time daily in the Radiology Department.
- **Study Tool**: Primary data collection was done by observation of the time taken by patients to complete each process right from the time of reporting time in radiology department to the report collection

METHOD OF DATA COLLECTION

DATA ANALYSIS PLAN

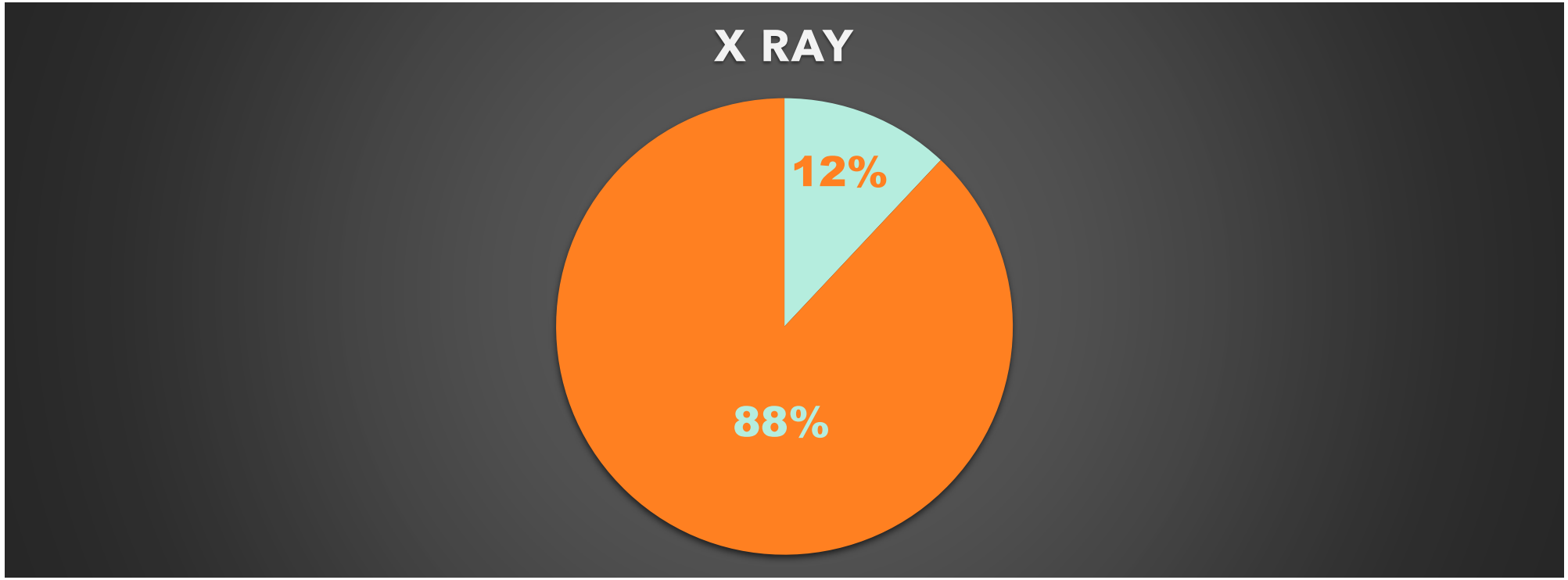
Quantitative data would be analyzed using data analyzing software or MS excel.

By Dividing Data into:

T1	**Reporting in the department till the patients get in for the investigation (waiting Period)**
T2	**Investigation in and Investigation out time (Scanning Time)**
T3	**Investigation out till the Report Generated Time**

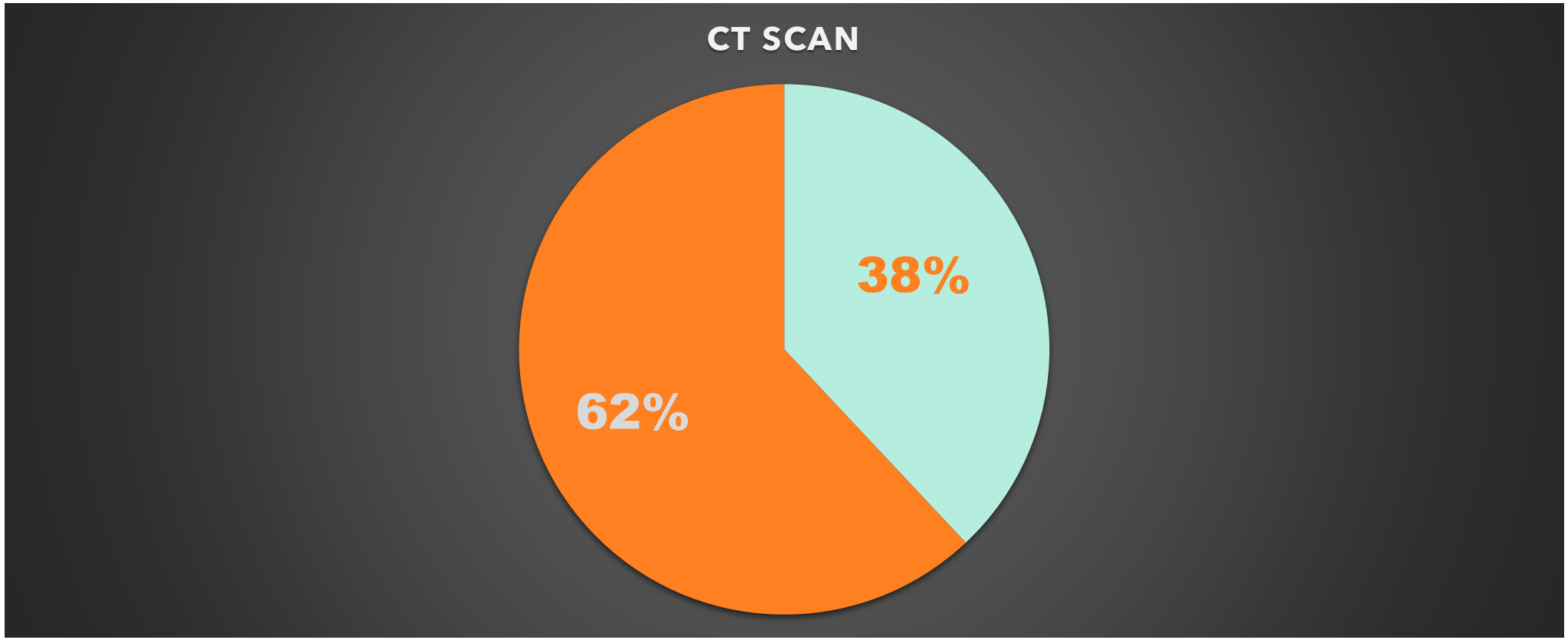
INCLUSION CRITERIA	EXCLUSION CRITERIA
Contrast and Non contrast investigations were included in this study for all modalities	Emergency patients, Sunday and night shifts were excluded due to prioritization of immediate scanning
Only abdomen and pelvis investigations were included for USG Examinations	Fluoroscopy, Endoscopy and NCV were excluded because of their known longer patient preparations and investigation times.

DATA COMPILATION, ANALYSIS AND RESULTS



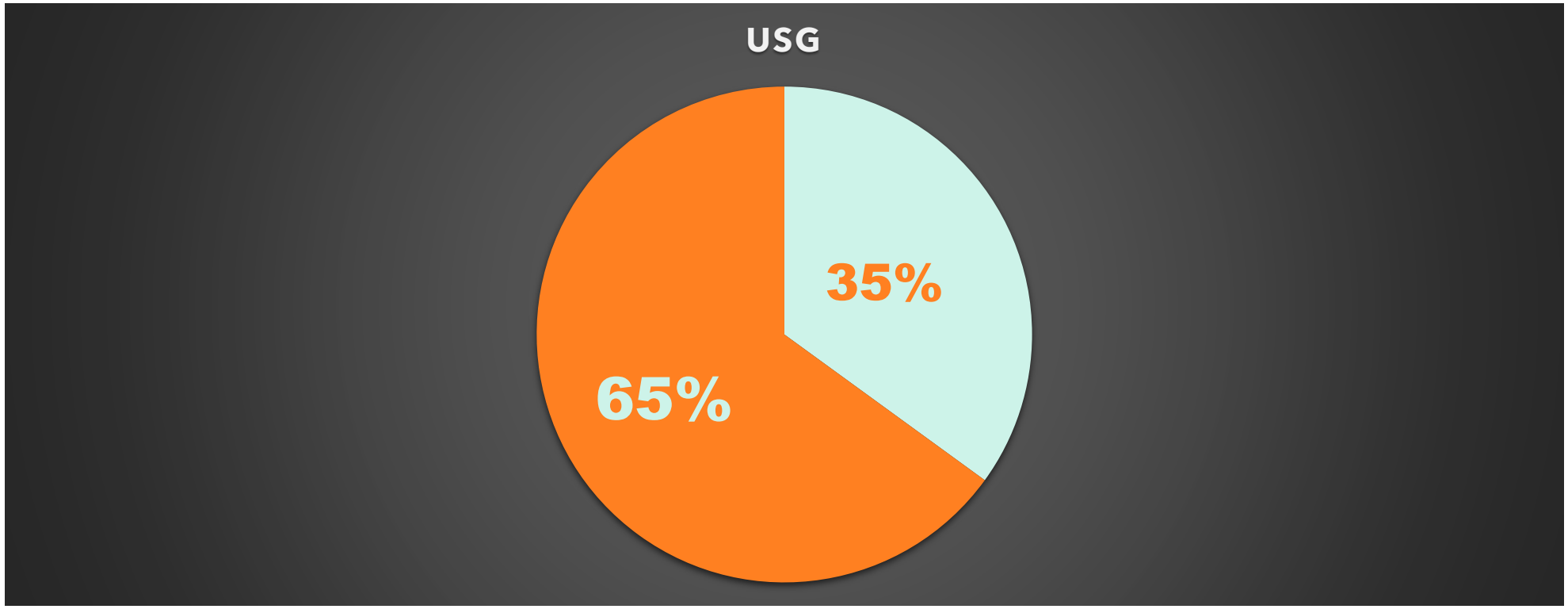
The Above Chart showing the distribution of patients with TAT. The total number of patients included in the study is 240 in which the patients observed for the TAT in X Ray are 60 in number. The stipulated time for the X Ray is 2 hours according to the Hospital, by calculating the TAT 12% of the patients is founded above the stipulated time whereas 88% of patients are within the stipulated time.

TAT FOR CT SCAN



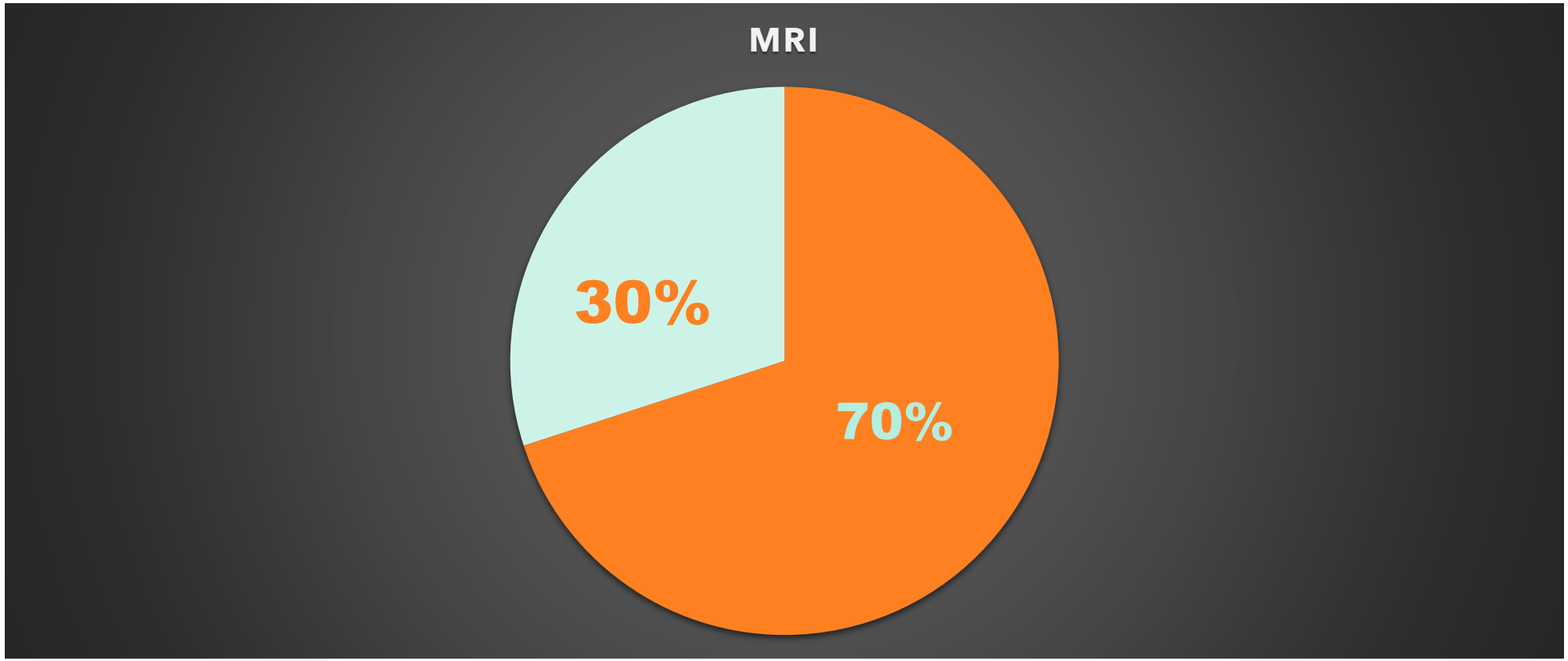
The Above Chart showing the distribution of patients with TAT. The total number of patients included in the study is 240 in which the patients observed for the TAT in CT scan are 60 in number. The stipulated time for the CT scan is 2 hours according to the Hospital, by calculating the TAT 38% of the patients is founded above the stipulated time whereas 62% of patients are within the stipulated time.

TAT FOR USG



The Above Chart showing the distribution of patients with TAT. The total number of patients included in the study is 240 in which the patients observed for the TAT in USG are 60 in number. The stipulated time for the USG is 2 hours according to the Hospital, by calculating the TAT 35% of the patients is founded above the stipulated time whereas 65% of patients are within the stipulated time.

TAT FOR MRI



The Above Chart showing the distribution of patients with TAT. The total number of patients included in the study is 240 in which the patients observed for the TAT in MRI are 60 in number. The stipulated time for the MRI is 3 hours according to the Hospital, by calculating the TAT 70% of the patients is founded above the stipulated time whereas 30% of patients are within the stipulated time.

TAT CONCLUSION

- The maximum TAT was observed for MRI and minimum was observed for X RAY.
- Maximum values for MRI and CT SCAN, TAT have exceeded the stipulated time given by the department
- Maximum values for USG and X RAY are well within the stipulated time
- The reduced TAT in X Ray may be due to;
- Less duration of time scans of patient in X Ray and somehow shorter scan times than MRI.

TAT CONCLUSION

- The increased TAT in MRI may be due to;
- Longer scan times
- Unpredictable delays because of additional sequences
- Patient movements which lead to repeat scans
- The increased TAT in USG may be due to;
- Longer patient preparation (such as full bladder)

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RECCOMENDATIONS

Reasons for prolong time in giving reports should be resolved which will decrease waiting period preventing patients from walking out even after they have received the requisition number.

Centre should fill outpatient feedback from on regular basis for patient satisfaction.

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RECCOMENDATIONS

One dedicated help desk staff who can assist patients with directions and whom to see, since a lot of patients were observed crowding at admission counters inside the department.

Dedicated medical transcriptionist should be available for making the report because the clerks not only have to issue requisition number but also answer patients who check for their reports, they have to manually enter all entries in register along with other details of the patient

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GENERAL RECCOMENDATIONS

GT STAFF: I found a major issue of GT Staff. Because of the insufficient GT Staff the attenders who are coming along with the patients are handling the patients by themselves

WHEELCHAIR ISSUES: For thrice I have noticed that patients are roaming for the wheelchair allotment. I think wheelchair number should be increased by 2 to 4 in number and secondly wheelchair allotment station should be one. where patient can go and take token for it from the front office and get the wheelchair from there.

BILLING FAULT : On 31.04.2022. I have seen a fault billing of patient Chanchal Gupta who came for CT Scan but the billing slip she was having was of MRI. As I always match doctors prescription to the billing so I caught the fault in the billing. I told patient to wait, and I immediately contacted the billing office and made it adjusted..

Kumud Devi billing fault in name of X RAY bill by Rumud devi

WAITING TIME IS THERE : I found that there is a waiting time for RGHS patient then the normal patients which sometimes cause a major issues and fights if we give preference to the Cash patient or to some IPD Patient so to resolve this we can queue the patients in the gap like 1..3..5..7 and so on. So that if we want to take patient in between we can do it without hassle.

Contrast issue : MRI technician staff facing issues for the contrast due to the lack of contrast allotment patient needs to wait

RECCOMENDATIONS

HOUSEKEEPING

I have seen a lot of housekeeping issues in radiology department, There is no proper cleaning of the floors, washrooms are not at all cleaned, CT, MRI room are not cleaned, bedsheets are not cleaned, No clothes are there for the patients to change and because of this patients, process gets delayed. In my point of view Housekeeping people should shuffle their duties, if the staff is not sufficient, I have called Housekeeping staff almost in every 3rd day to visit to the radiology department but most of the times they don't receive calls or if they don't visit same day. I think housekeeping should keep an eye about the cleanliness of floors, washroom and the clothes, so that we can avoid the inconvenience. Recently I have seen one of the patient is fighting and shouting in front of everyone on 11.05.2022 that I will write the review with the pictures on shalby review page, That how you maintain cleanliness of your hospital washroom and floor. I went there and talked to him, I said sorry for the inconvenience u have suffered but its not the hospitals fault its because a lot of patients came here and they don't even bothered to maintain the cleanliness and I immediately asked him to show me those pictures and I clicked it from his mobile phone, somehow I talked to him and convinced him to not post pictures on the page, at that moment I immediately called Dr. Dilshad who is the head of Non clinical staff and told him about the whole issue, I sent him the pictures as well to handle the situation he immediately sent the Housekeeping staff to make the washroom clean.

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Thank You