THE MISSION HOSPITAL

TO ANALYZE REPORTING TAT AND WAITING OF PATIENTS IN RADIOLOGY DEPT

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INTRODUCTION

- Radiology is one of the most crucial part of the hospital's day to day operational activities in OPD as well as IPD.
- Not only important from revenue point of view but majorly from patient satisfaction point of view because patient satisfaction is the first and foremost goal of any hospital regardless of specialties and facilities.
- The TAT(Turn-Around-Time) of Radiology Department shows the efficiency of hospital in treatment of patients. As it is the crucial part in taking decision for further treatment
- In this project I have tried to analyse the TAT from waiting time of patients for procedure and final reporting of the tests.

Objective

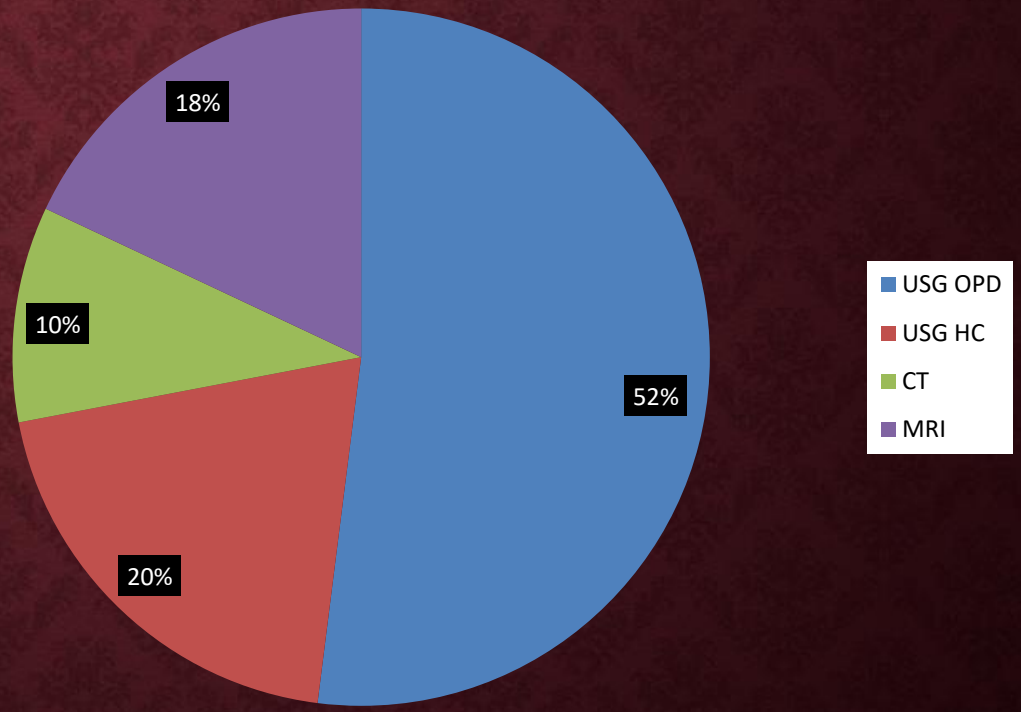
- Understand the patient flow process of Radiology Department
- Calculate the TAT(Waiting Time) of patients coming for diagnostics.
- Identify reasons for delay in waiting time
- Calculate the TAT for report generation in radiology department.
- Identify the reasons for delay in report generation time.
- Suggestive measures for improvement.

Methodology

- Study design – Observational study
- Study Duration – First week of march 23 till date
- Data Source - Primary (Manual collection) and secondary data.
- Study Area – Radiology department at ground floor.
- Sampling Technique – Simple Random Sampling

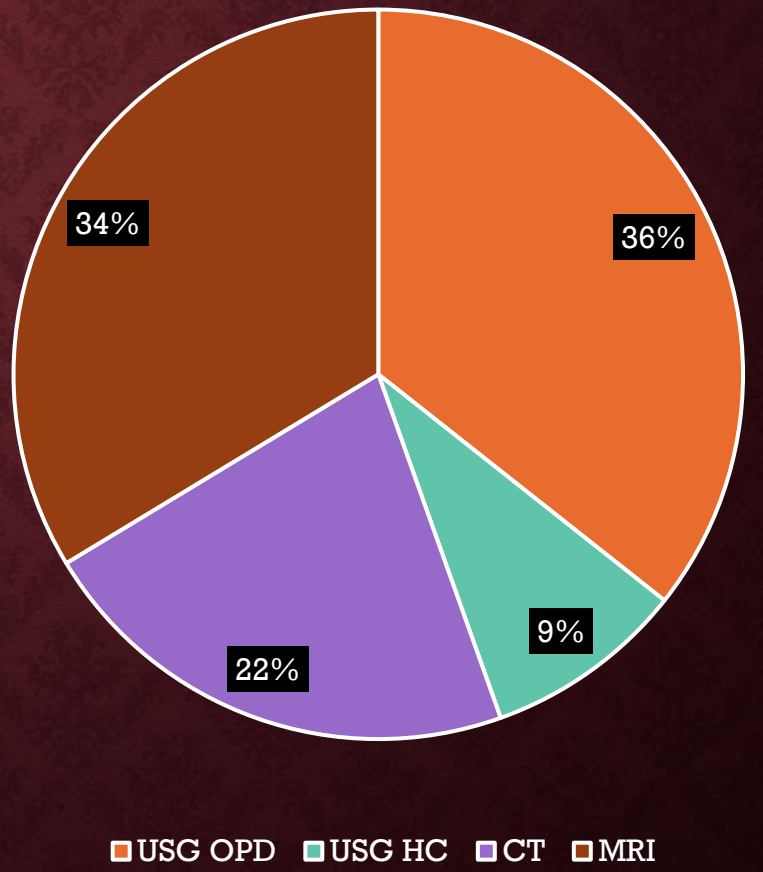
NO OF SAMPLES

No of Samples	
Speciality	Number(Percentage)
USG OPD	**777(52%)**
USG HC	**293(20%)**
CT	**154(10%)**
MRI	**267(18%)**
Total	**1491(100%)**

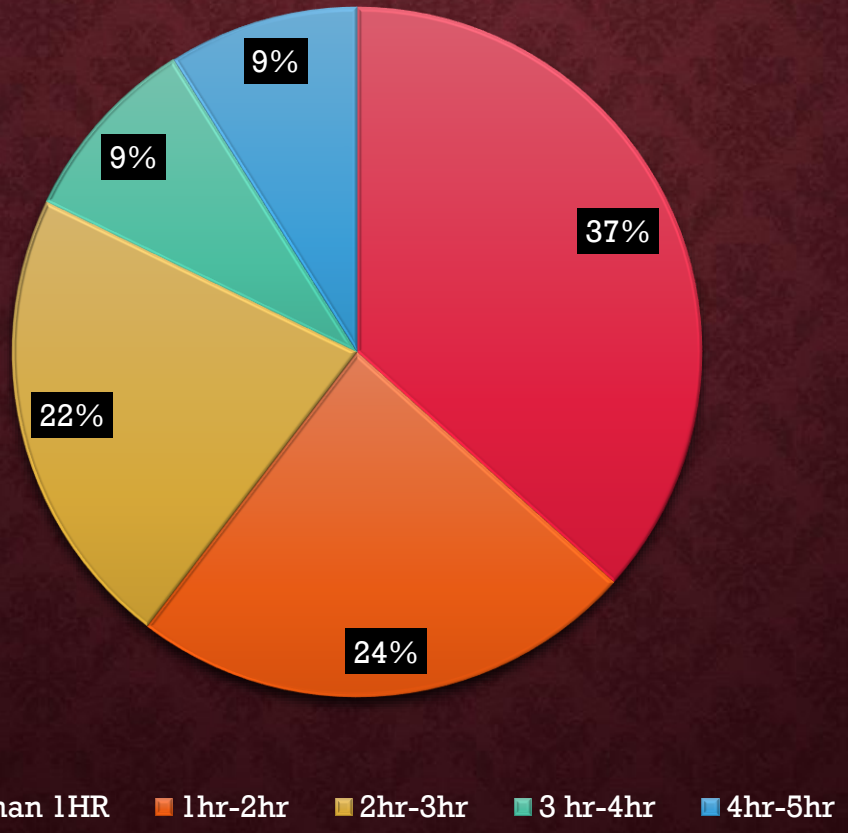


WAITING TIME TAT

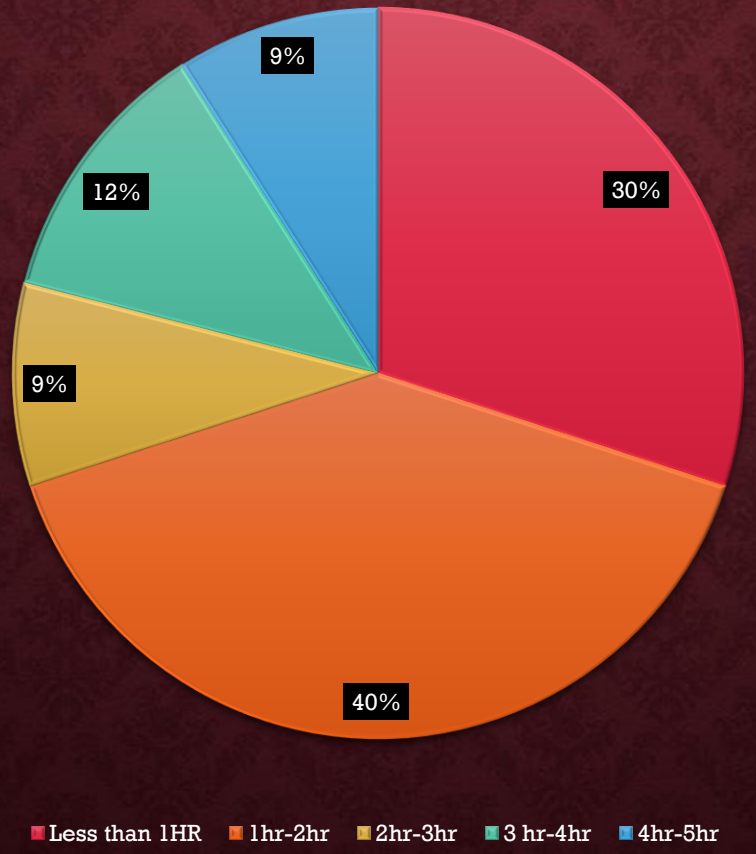
waiting time between p/t bill time and p/t in time for procedure	
Speciality name	Avg waiting time(in mins)
USG OPD	**180(34%)**
USG HC	**45(9%)**
CT	**110(22%)**
MRI	**170(34%)**
Total	**505(100%)**



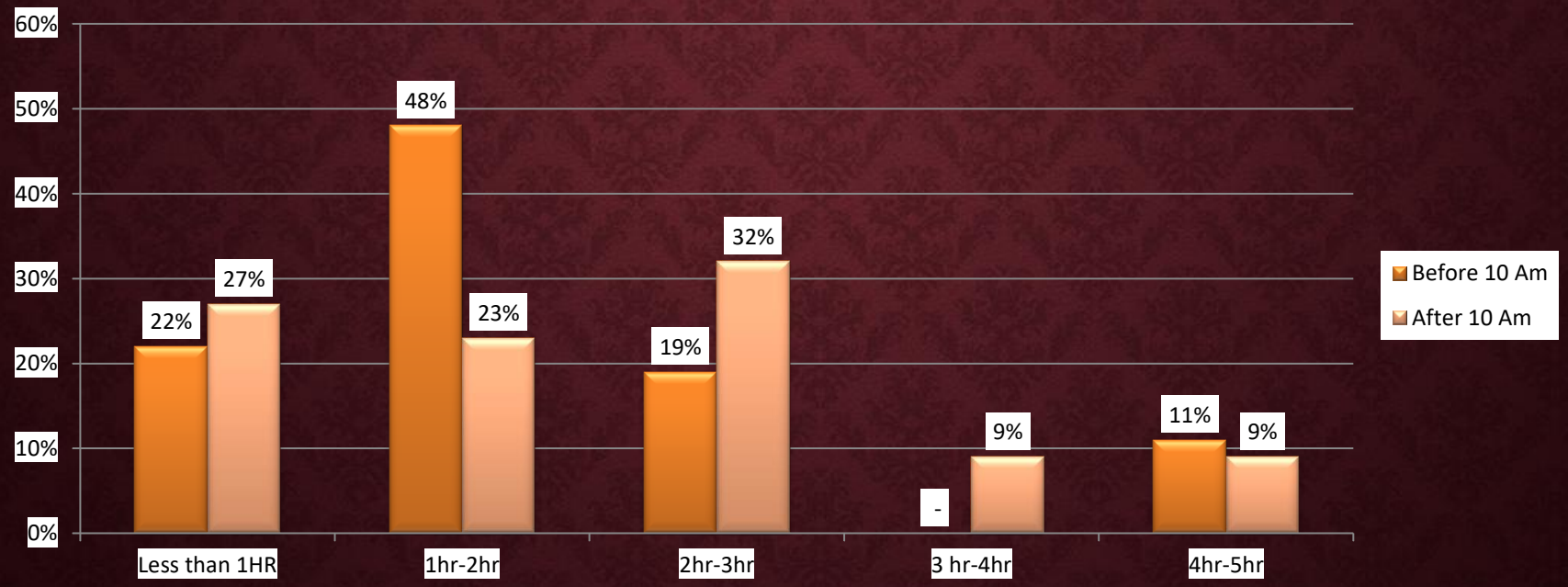
Waiting time as per duration						
Speciality name	Less than 1HR	1hr-2hr	2hr-3hr	3 hr-4hr	4hr-5hr	Total
CT	**57(37%)**	**37(24%)**	**34(22%)**	**14(9%)**	**14(9%)**	154(100%)



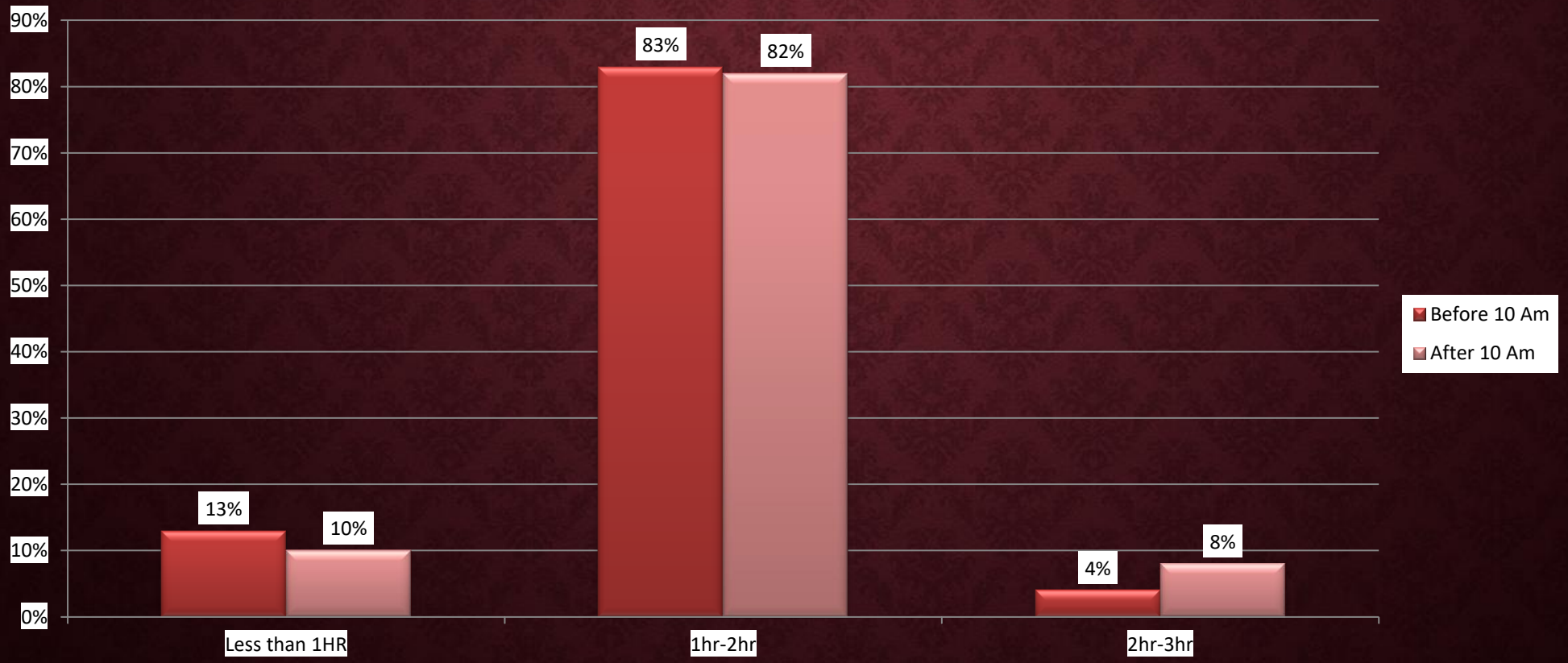
Waiting time as per duration						
Speciality name	Less than 1HR	1hr-2hr	2hr-3hr	3 hr-4hr	4hr-5hr	Total
MRI	**80(30%)**	**107(40%)**	**24(9%)**	**32(12%)**	**24(9%)**	**267(100%)**



TAT of p/t in-time for procedure and billing time(USG OPD)						
Bill time	Less than 1HR	1hr-2hr	2hr-3hr	3 hr-4hr	4hr-5hr	Total
Before 10 Am	**94(22%)**	**205(48%)**	**81(19%)**	-	**47(11%)**	**427(100%)**
After 10 Am	**95(27%)**	**81(23%)**	**112(32%)**	**32(9%)**	**32(9%)**	**350(100%)**

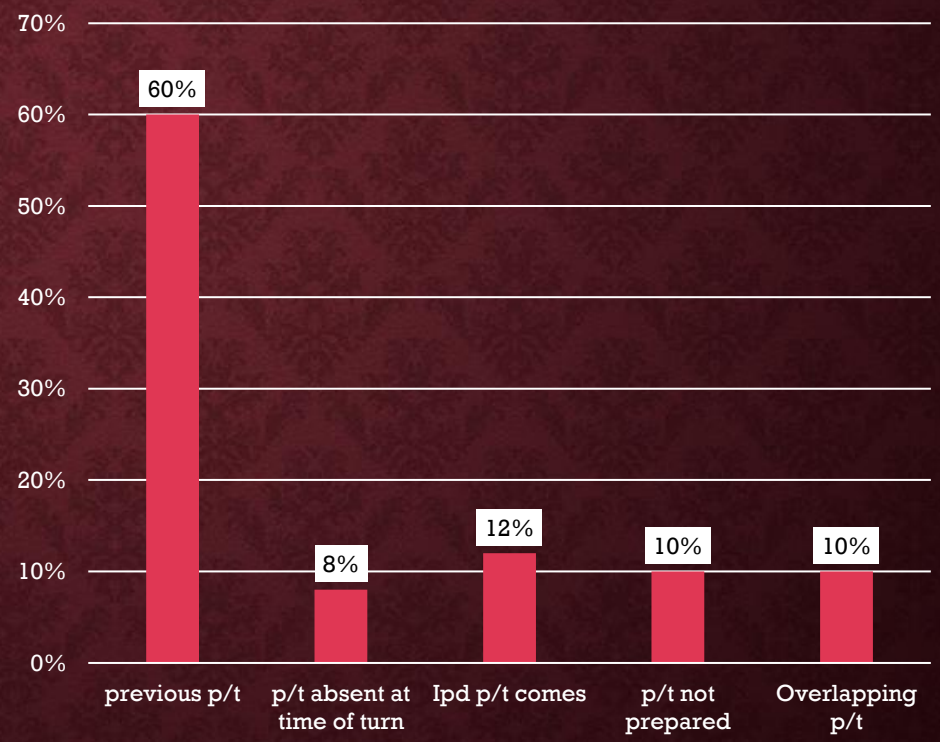


TAT of p/t in-time for procedure and billing time(USG HC)				
Bill time	Less than 1HR	1hr-2hr	2hr-3hr	Total
Before 10 Am	**27(13%)**	**170(83%)**	**8(4%)**	**205(100%)**
After 10 Am	**9(10%)**	**72(82%)**	**7(8%)**	**88(100%)**



Reasons of Delay as observed

reasons of Increased waiting time In USG OPD	
Reason	percentage
previous p/t	**60%**
p/t absent at time of turn	**8%**
Ipd p/t comes	**12%**
p/t not prepared	**10%**
Overlapping p/t	**10%**



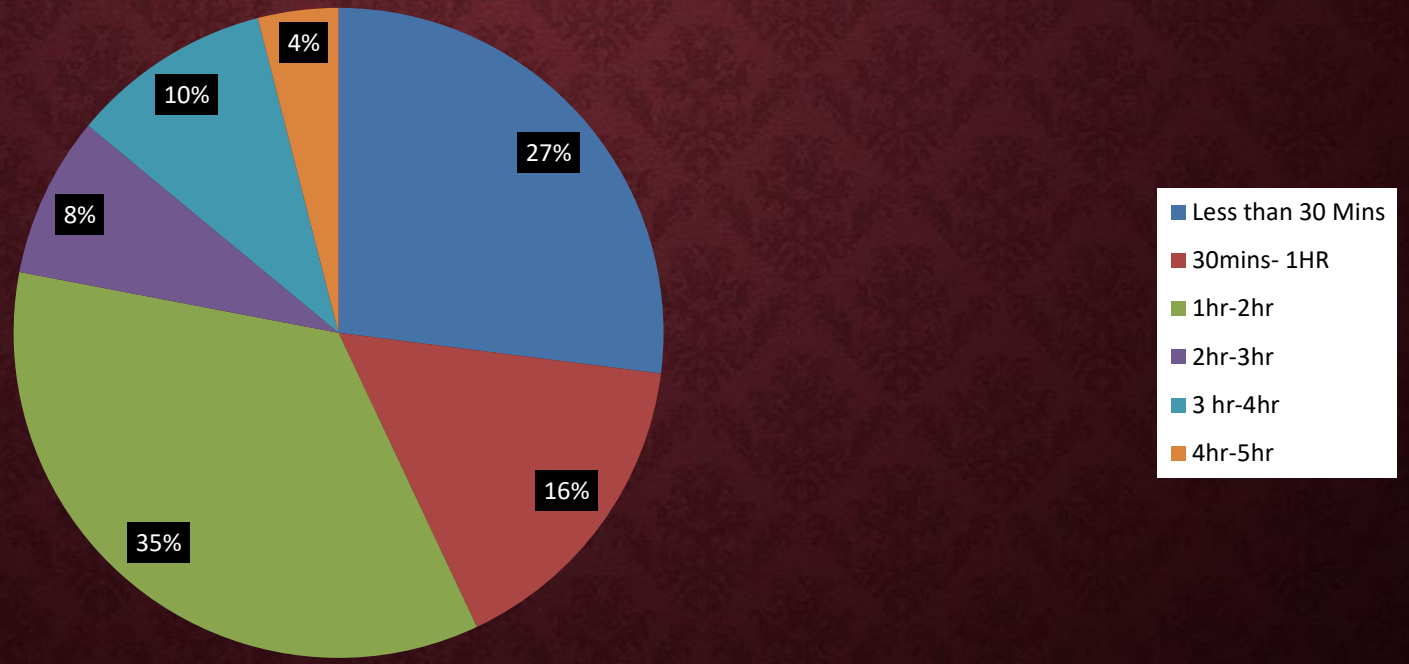
RECOMMENDATIONS (FOR WAITING TIME)

- As observed, there is great extent of waiting time in USG dept, Although the staff is fully efficient & dedicated, However the delay is observed from patient's side
- Recommendation would be to stick a poster outside USG dept in regional & national language regarding all aspects of p/t preparation for USG tests, because it has been observed that p/t enquires about how much water he has to intake for test,
- Not only will it reduce the workload of staff to tell almost every p/t that how much water he has to intake, but also it will make easier for staff to take p/t for test easily and without delay.
- Next recommendation would be to start billing of USG at 10 Am rather than before that, as it has been observed that p/t have to wait for USG to start at 10 Am, However there billing has been done prior to that.

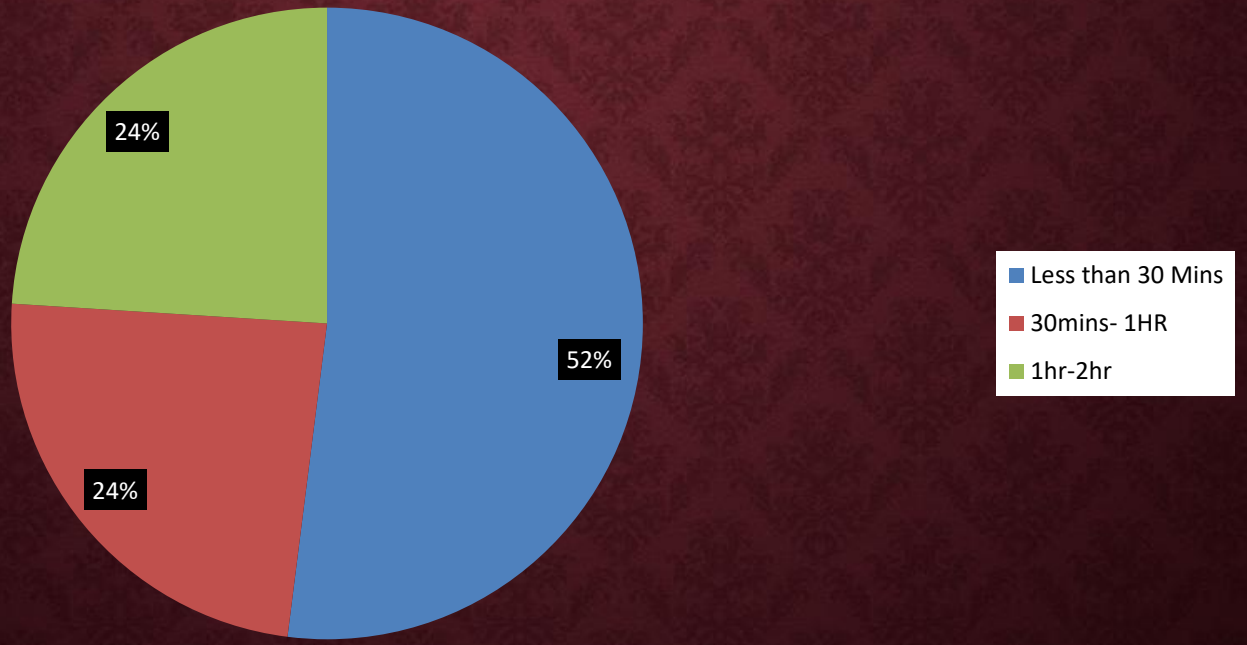
- This will reduce the pressure of managing the delays as waiting time would be reduced for p/t waiting to start USG
- Moreover it is suggested to do the billing of only 5 p/t at a time and for duration of 10-15 min later after first billing slot. This will reduce the problem of p/t absenteeism at time of their turn and also it will give chance to intake IPD p/t without delaying the OPD p/t as the next billing slot would be 10-15 min later.
- These measures, if implemented, can reduce the delay caused by the previous p/t problem.

REPORTING TAT

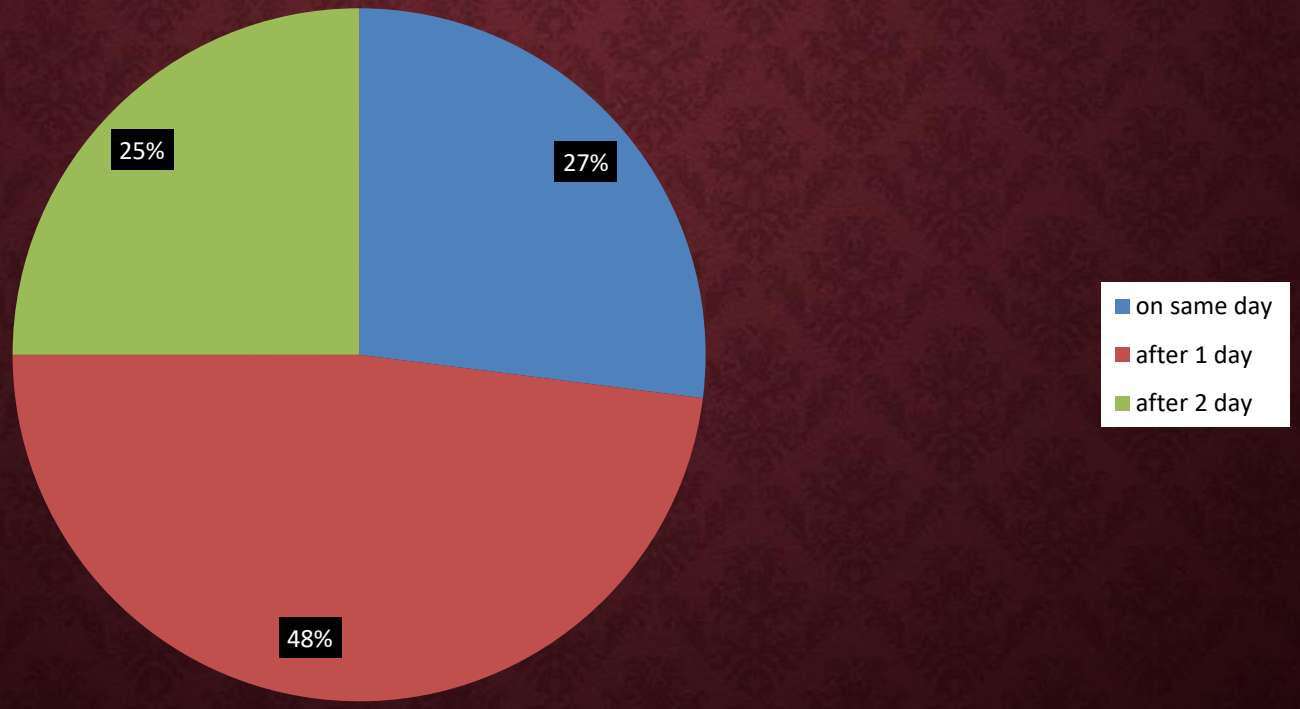
Speciality name	Less than 30 Mins	30mins-1HR	1hr-2hr	2hr-3hr	3 hr-4hr	4hr-5hr	Total
USG OPD	**210(27%)**	**124(16%)**	**272(35%)**	**62(8%)**	**78(10%)**	**31(4%)**	**777(100%)**



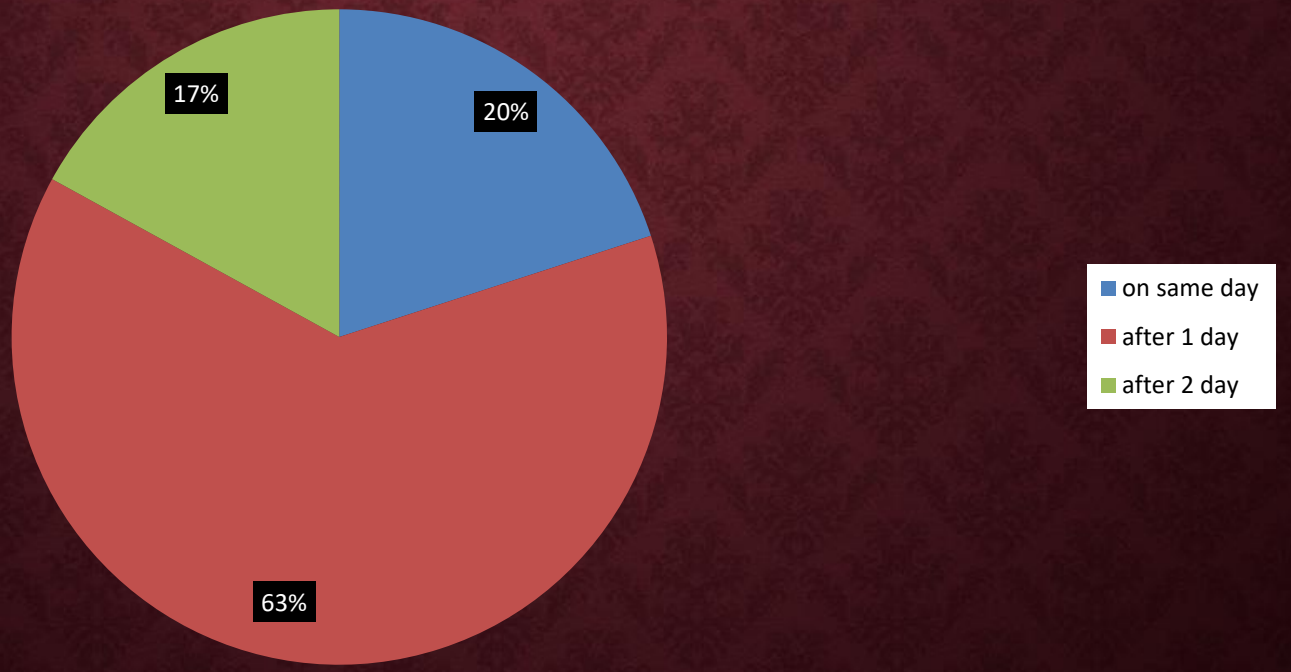
Speciality name	Less than 30 Mins	30mins- 1HR	1hr-2hr	Total
USG HC	**152(52%)**	**70(24%)**	**70(24%)**	**292(100%)**



Speciality Name	on same day	after 1 day	after 2 day	Total
CT	**42(27%)**	**74(48%)**	**39(25%)**	**155(100%)**



Speciality Name	on same day	after 1 day	after 2 day	Total
MRI	**53(20%)**	**168(63%)**	**45(17%)**	**267(100%)**



RECOMMENDATIONS (REPORTING TAT)

- Although there is no major reason has been observed for which reporting has been delayed, but few measures can be taken to further reduce the reporting TAT
- System Buffer – It has been observed that the system in which report is being prepared, sometimes doesn't performs at par due to which there is additional delay of avg 10 mins,
- However it's occurrence is not there in there in every report generation process but it can be fairly said that around 15% report generation process do experience this problem
- Recommendation would be necessary upgrades regarding software & hardware as per requirement.

- Correction in report – There is sometimes correction is advised at time of report generation, Although this also doesn't have prevalence in every report generation process but it can be fairly said that around 5% report generation experiences this reason.
- Recommendation would be to focus more on training regarding reducing chances of correction
- However there is one reason due to which specifically reporting TAT of MRI & CT is affected, that is that CT & MRI are functional & catering patients round the clock
- This increases the TAT of final reporting as the load of result analysis is extended
- Recommendation would be to allocate staff specific for result analysis of Night.