OT UTILIZATION IN APEX HOSPITALS

Dissertation Submitted to

IIHMR University, Jaipur

For the partial fulfillment for the award of the degree of

Master of Business Administration (MBA)

In

Hospital and Health Management

By

Dr. Kanika Sharma

Under the Supervision and Guidance of

Dr. Sheenu Jain

2022

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DECLARATION BY STUDENT

I hereby declare that this dissertation titled OT Utilization in Apex Hospitals, Jaipur is the bonafide record of my original research work. I declare that it has not been submitted to any other university or institution for the award of any degree or diploma. Information derived from the published or unpublished work of others has been duly acknowledged in the text.

(Signature)

Name of Student: Dr. Kanika Sharma

Date:

CERTIFICATE

This is to certify that Dr. Kanika Sharma in partial fulfillment of the requirements for the award of the degree of MBA Hospital and Health Management from the IIHMR University, Jaipur has successfully completed her/his internship at Apex Hospitals, Malviya Nagar during March 22, 2022 to June 19, 2022.

Date:

Place:

Preceptor/Head of the Organization

Name of the Organization

CERTIFICATE

This is to certify that dissertation titled OT Utilization is a record of the research work undertaken by Dr.Kanika Sharma in partial fulfillment of the requirements for the award of the degree of MBA Hospital and Health Management from the IIHMR University, Jaipur under my guidance and supervision and his/her approach to the research study has been sincere, scientific, and analytical.

Dr. Sheenu Jain

IIHMR University, Jaipur

Date

School Dean

IIHMR University, Jaipur

Date

ABSTRACT

To evaluate the current workload, and perhaps to optimize facility operation and scheduling of the patients for surgical procedures, proper analysis of the operating room is crucial. [1] An exceptional management is required to satisfy patients, meet the needs of surgeons and the operating room team, and demonstrate that the operating room is operating properly.

To increase the efficiency of operations, a utilization analysis of operating theatres is required. The most efficient use of the OT not only lowers operating costs but also boosts revenue. The factors considered were the OT list, which was released a day before surgery, patient shift in time, patient shift out time and actual time spent on each surgery. The information was gathered, organized, and analyzed.

Objectives

1. To examine the overall use of OT

2. To understand the root causes analysis of delay and rescheduling in OT procedures.

3. To identify the proportion of planned and unplanned surgeries

4. To determine the bottleneck in the proper and efficient use of Operation theatre time & recommend remedial methods to improve Operation theatre utilization

Methodology

An Observational Prospective type of study was conducted at Apex hospitals Malviya nagar which is a 200 bedded NABH accredited hospital for 1 month .The resource utilization hours for the OT were taken from 9 am to 5 pm (8 hrs /480 min/day) for 25 days i.e. 12,000 min and the utilization of the OT was calculated between the same time. All the surgeries of the departments which were done in 5 OT was observed for the study. Data was taken by taking rounds of the different departments where the patient was shifted post operatively.

Key results

Out of the 5 OT's, OT 1 and 5 were utilized the most in the resource hour i.e. about 65% each. OT 4 was utilized for about 53%, followed by OT 2 about 48 %. OT 3 was the least utilized OT with a utilization rate of 41% out of all the OT's.

Out of 264 surgeries occurring between the resource hours from 9 am to 5 pm, about 85 surgeries that is about 32 % of surgeries showed a delay in start for the day for OT. Only about 16 surgeries i.e. 6.06% of the surgeries started at 9:00 am and two surgeries i.e. 0.75% of surgeries started before time.

OT 4 had the maximum delay in OT start time with a delay of about 1 hr 55 min i.e. Approximately a delay of 2 hour from the ideal OT start time of 9:00 am. OT 2 showed a delay of 1 hr 47 min, followed by OT 1 with a delay of 1 hr 25 min, OT 3 with a delay of 1 hr 4 min and OT 5 with a delay of around 53 min.

219 surgeries out of 264 were planned remaining 45 surgeries fell into the categories of unscheduled, Re-scheduled, Re-exploration, Surgery Modification or Emergency OT cases. From these 45 surgeries, 57.78 % of the cases were unscheduled, 33.8% of cases were either Re-scheduled, Re-exploration or Surgery Modification OT's and 8.89 % of cases were emergency OT.

Conclusion

I concluded that the majority of reasons for surgical delays and cancellations could be avoided with excellent pre-operative planning, resource and patient optimization, and effective coordination between the surgical team , anesthesiologists and nurses.

Key words

Resource utilization hours, operation theatre, re-scheduling of surgeries, utilization.

ACKNOWLEDGEMENT

I would like to take this opportunity to express my deep sense of gratitude to all those people without which this project report would not have been so successful.

First and foremost, I would like to thank, Indian Institute of Health Management and Research who gave me the golden opportunity to do this wonderful project.

I convey my special thanks, to my mentor Dr. Sheenu Jain (Associate Professor, IIHMR University) Dr. Sandeep Sharma Sir (Manager clinical operations) and Ms. Vaishali Patidar Ma'am (Quality Manager) for their constant support and guidance.

I would thank my parents for their inexhaustible source of inspiration.

I would also like to thank my close friends who taught me many things and corrected me throughout the time.

At last but not the least I would like to thank the almighty for blessing me with a beautiful life for giving me strength and patience to overcome difficulties. Without his blessings, the achievement would not have been possible.

Dr. Kanika Sharma

IIHMR Batch-2020-22

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LIST OF ABBREVIATIONS

RGHS	Rajasthan Government Health scheme
ECHS	Ex-Servicemen Contributory Health Scheme
CGHS	Central Government Health Scheme
OT	Operation Theatre
OR	Operating Room
ICU	Intensive Care Unit
CTVS	Cardio Thoracic and Vascular Surgery
CSSD	Central Sterile Supply Department
CABG	Coronary Artery Bypass grafting
URSL	Ureteroscopy and laser stone fragmentation
ENT	Ear, Nose, Throat
Pre-op	Pre-operative
Post-op	Post-operative
MOTC	Main Operation Theatre complex
HMIS	Hospital Management Information System

Table 1: List of Abbreviations

Dissertation Report

Utilization of operation theater in Apex Hospital, Jaipur

Chapter 1-Introduction

Operation theatres are commonly referred to as the "heart of the hospital." In a hospital budget, the operating room represents a significant expenditure. [2] Along with rising expenses, poor use of operating rooms has resulted in long waiting time, a high number of cancellations, frustration among OR staff, as well as elevated anxiety that had a detrimental effect on patients' health .[3] Any hospital's operation theatre must be correctly operating in order to maximize surgical productivity.

A hospital's operation theatre complex represents a large investment in a hospital's budget, and it must be used to achieve the best cost-benefit ratio possible. Operation Theater is the most essential part of any surgical services in the hospital. It has been stated in medical literature that hospital administration and leadership play a vital role in the establishment of properly running an operation theatre, but many other aspects are equally important.

It is dependent on the provision of a variety of medical care and services, such as the equipment used in various day to day processes of hospital, medications, timely management of various services, sterilization practices, and management of proper infection control rate. Along with all of the above expediency, expense, and infection prevention and control are all factors to consider for a successful running of OT in any hospital.

An operating room utilization survey or inspection is required to evaluate the current load of the work as well as to optimize the hospital’s operations and patient line up schedule for surgical procedures. It also helps in assigning the time for emergency operations, sterility of processes while taking necessary precautions, and gives us a clear data for making any kind of decision for the expansion of the facility. In different healthcare settings, the amount of time spent on operations varies.

For hospital administrators, getting the most out of OT time has long been a primary center of focus. The cancellation of the pre-planned or scheduled operations on the due day of the procedure wastes time and resources in the operating room (OR). Because of cancellations, patient flow is disrupted, theatre throughput is reduced resulting in loss of resources , revenue as well as high customer dissatisfaction.

Patients suffer psychological anguish as a result of cancellation since they have to go through all the processes again. The patient's and their families' emotional and financial consequences can be severe. Various aspects such as qualified employees, proper facilities, equipment, efficient communication and operational structure, all contribute to successful utilization of available resource hours.

A proper and efficient utilization of OT is also dependent on the interaction between personnel and resource accessibility, as well as the attitudes and practices of all individuals engaged. A well planned pre-operative patient preparation and assessment, availability of beds, the functioning of the CSSD, and the staff availability for various role in different departments are all factors that influence theatre efficiency. In India, data on the usage of available operational time is limited, and the causes of less-than- optimal utilization have not been examined. Understanding the amount of time spent on each activity is an important factor for improving operating room utilization.

Rationale of Study

Getting the most out of OT hours was and still is a top concern for hospital's management system. It contributes in providing backup time for emergency OT's, infection prevention and processes, and decision-making data for facility expansion or downsizing. Apex Hospital is a 200 bedded hospital and is in its growing phase with a great inflow of patients from RGHS, CGHS, ECHS and other panel patients, resulting in an increase of total patient load thereby increasing the total OT procedures , to an average of about 400 OT per month which calls for making the OT utilization time to be more planned and efficient.

Considering this, a worry was made about making the best use of the hospital's resources. As a result, a study was conducted to analyze the overall use of the O.T. by various departments. This will aid in not just assessing the current workload in the operating room, but also in optimizing facility operations and proper scheduling of patients for surgical procedures.

Aim

To investigate the total OT utilization, and other OT-related parameters at Apex Hospital Malviya Nagar.

Objectives

1. To examine the overall use of OT.

2. To understand the Root causes analysis of delay and rescheduling in OT procedures.

3. To identify the proportion of planned and unplanned surgeries.

4. To determine the bottleneck in the proper and efficient use of Operation Theatre time & recommend remedial methods to improve Operation Theatre utilization.

Chapter 2-Review of Literature

Improving the functionality and efficacy of an operating room at a hospital where the technology and advances in the treatment facilities, are constantly changing has always been a challenging and risky procedure. Any hospital's operation theatre must be correctly operating in order to maximize surgical productivity. To get a clearer view about the concept of OT utilization a thorough analysis of the literature review was done. The table below shows the OT utilization study done in different settings and their outcomes.

S.no	Title of Study	Authors	Methodology	Salient features
1.	Operation Room Utilization at AIIMS, a Prospective Study(August to October 2001)	Reena Kumar, R.K. Sarma	A prospective study was carried out for 3 months at the main operation theatre complex at AIIMS, Delhi. MOTC of AIIMS had 12 OT rooms out of which OT 1 was for emergency and OT 12 for septic cases, Rest were the twin operation rooms allocated to other specialties' Resource OT time was taken from 8:30 am to 4:30 pm.	The data acquired from various O.T.s with regards to O.T. utilization revealed that, for the most part, all O.T.s were adequately employed per the working schedule. The M.O.T. Complex's overall O.T. utilization rate was 90.4 percent. The typical O.T. case started at 8.45 a.m., ended at 3.55 p.m., and the theatre closed at 6.30 p.m. According to the resource OT time with 5 days a week and 8 hours of daily OT theater resource time, it was found that OT 3, 4, 5, 6, 9, and were fully utilized for about 7.12 to 7.47 hours . O.T.-7 was underutilized with the utilization rate of near about 6.20 hours. O.T.-8, 8A, and 11 were operating more

				than the resource hours and were overburdened with a functioning of about 8.12 to 8.18 hours per day.
2.	Time Utilization of Operating Rooms at a Large Teaching Hospital((15-7-99 to 14-1-2001).)	F. A. Jan, Syed. A. Tabish, Shigufta Qazi, M. Shaffi. Atif	Observational study was carried for a period of about of one and half year. Different OT's were observed for a period of 3 months each by the method of simple random sampling technique with a sample size of 30%.The OT resource hours were taken between 10 am to 4:00 pm.	The OT utilization was found out to be 64.31 % which was taken as an optimal rate when compared to the other healthcare facilities.
3.	Tikur Anbessa Specialized Hospital (TASH), in Addis Ababa, Ethiopia. A Tertiary care referral center in Ethiopia	Samuel Negash, Endale Anberber, Blen Ayele, Zeweter Ashebir, Ananya Abate, Senait Bitew, Miliard Derbew, Thomas G. Weiser, Nichole Starr & Tihitena Negussie Mammo	A Descriptive observational study, was carried out in a tertiary care hospital for three months.8 OT's were observed during the study period and their respective efficiency was assessed by looking at the start and finish times of surgical cases, room turnover times, cancellations, and the reasons for cancellation. Working hours of 8 hr/day for OT were taken. OT start time was taken to be 8 am. Emergency operating rooms were not taken into consideration for the study. Data	During the research period, 687 procedures were done. Many times , two cases were performed per day in a room (39.6%), followed by one case per day which accounted for about (36.5 percent). Additional procedures were occasionally conducted, with a total of three procedures per day accounting for about 16.4 percent of operating rooms and four procedures per day in 7.4 percent. The number of total planned elective cases

			Collection was done by SPSS software.	was 933, with 246 cancellations, with a rate of 35.8%. Lack of OR time was the most common reason for cancellation, followed by pre-operative patient preparation .Other factors also included lack of beds in ICU.
4.	A Prospective Study on Operation Theater Utilization Time and Most Common Causes of Delays and Cancellations of Scheduled Surgeries in a 1000-Bedded Tertiary Care Rural Hospital with a View to Optimize the Utilization of Operation Theater(November 1, 2017, to December 31, 2017)	Shraddha Vidyadhar Naik, Vithal Krishna Dhulkhed, and Rewa Hemant Shinde	The study was conducted in a 100 bedded hospital at Maharashtra. Resource utilization hours taken up for the OT were from 8:00 am to 4 pm ,excluding Sunday and public holidays. Prospective study method was used over a period of 2 months. The observations were made only for the planned or scheduled OT cases which were released a day before by 8 pm. The last taken case that was induced after 2 pm and all the emergency surgeries was also excluded from the study.	In the study total of 8 OT tables were observed for 6 days each for all the specialties. The final resource hours for the study days were taken to be 46,80 min for 98 days. It was concluded that ENT took the longest, at 490 minutes , followed by orthopedics at 478.33 minutes , and surgery at 305 minutes , 295.65 minutes and 289.23 minutes for each table respectively. In both theatres, ophthalmology took 195 minutes and obstetrics took 189 minutes and 185 minutes .
5.	An analysis of time utilization and cancellations of scheduled cases in the main operation theater complex of a tertiary care	S Talati, AK Gupta, A Kumar, SK Malhotra,1 and A Jain2	A prospective study was carried from Dec 2010 to April 2011.Each of the 16 OT were observed for total of 96 days. Resource hours for OT was taken from 8 am to 4 pm i.e. 480 min/day or 46,080	252 of the 325 scheduled cases were operated on, while 73 (22.5%) were terminated. 15 days (15.63 percent) of the time, the OT table did not start at the planned time. The mean "Raw

	teaching institute of North India(December 2010 to April 2011)		min for 96 days. Parameters like time Spent on surgery, OT TAT, shift in and shift out time were taken into consideration. PSS software version 15 was used for the study.	utilization" was 37,573 minutes (81.54 percent) out of the total OT resource hours of 46,080 minutes)
6.	Osmania General Hospital (OGH), Hyderabad a tertiary Care teaching hospital	Dr. Mekala Jaya Krishna1 ,Dr. K V Sandeep2 , Dr. Anuradha3	Six OT were chosen for the study, with the exception of two theatre complexes, MOT and EOT . The date was extracted from the OT records. The number of procedures performed each month, as well as the time it took, were recorded.	The utilization of OT in the hospital was found to be 85% which was optimum.
7.	UTILIZATION OF OPERATION THEATRE(January 2011 to December 2011)	Dr. Nighat Bakhtiar, Dr. Masood Jawaid, Dr. Abdul Khalique, Prof. Pervez Iqbal	A cross-sectional study was conducted for one year from January 2011 to December 2011 at Dow's University of health sciences. Manually OT register was checked from the OT log register and findings and analysis was done.	The maintained record was adequate in general, although it was suggested that it could be better. Computerization of records, together with employee training on correct maintenance, could raise the quality of records to worldwide standards.
8.	Audit of operation theatre utilization in general surgery (12 month)	K Vinukondaiah 1, N Ananthakrishnan, M Ravishankar	The audit was conducted prospectively over a 12-month period at the Jawaharlal Institute of Postgraduate Medical Education and Research in Pondicherry's department of general surgery. The opening and closing of the	It was noted that the OT operated for 279 days throughout the study period, performing a total of 1773 procedures, (6.3 surgeries per day).91.5 % of the scheduled operating time was used. The most frequent reasons for 310 cases being cancelled were

			operation theatre, the interval between surgical procedures, the cancellation of surgical procedures, and the reasons for cancellation were all investigated.	insufficient operating time (65.2%), initiating an emergency surgery during the scheduled OT elective list (13.9%), and inadequate pre-operative patient preparation (11.3 percent). 63.6 % of the lists finished well in advance of the scheduled closing time, whereas 43.6 % of the lists began late. Anesthesia was introduced in the main OT, which took up 11% of the total operating time, due to a lack of appropriate monitoring equipment and additional certified anesthetists.

Table 2.1: Review of Literature

Chapter 3-Methodology

Study approach

Getting the most out of OT hours was and still is a top concern for hospital management. It contributes in providing backup time for emergency OT's, infection prevention and processes, and decision-making data for facility expansion or downsizing. Apex Hospital is a 200 bedded hospital and is in its growing phase with a great inflow of patients from RGHS, CGHS, ECHS and other panel patients, resulting in an increase of total patient load thereby increasing the total OT procedures , to an average of about 400 OT per month which calls for making the OT utilization time to be more planned and efficient. In order to understand the utilization better an Observational Prospective study was done from 1st April 2022 to 31st April 2022.

Study Respondents

A total sample size of 264 patients was taken, with the help of a simple Random sampling method .All the 5 OT's were observed and the shift in and out time for the patients were recorded by taking rounds and checking patient files the next day. The respective entries of the patient were entered in the excel sheet on daily basis and was then analyzed in the form of various graphs.

Data Collection and analysis

The OT list was generated by evening around 5 to 6 pm on everyday basis. The next day the operated patient location was identified by using HMIS software and rounds were taken in order to note the shift in and shift out time of the patient. This was done as no proper OT tracking records were maintained in the hospital. After the data was gathered, entries were done in the excel sheet on daily basis and the data was analyzed using bar graphs and pie charts.

- Shift in Time: The time of entry of the patient inside the operating theatre for their allocated procedure.
- Shift out Time: Time at which the patient is shifted back from the operating theatre, after the completion of its procedure.

The mathematical analysis was based on a comparison of scheduled, unplanned, and total surgeries, as well as the average time spent on each specialty per surgery. The OT Utilization was taken out by the below mentioned formula.

OT Utilization=Total time taken for any procedure inside OT ÷ total resource availability time of OT (8hr*60 min*25 days)*100

Inclusion Criteria: All over there were a total of 309 OT's done in the month of April (including 4 Sunday's for the month). In the sample size for this study only those OT happening on working days i.e. (Monday - Saturday) and starting from 9 am to 5 pm was included in the sample size. For the collection of the data random sampling was used and a sample size of 264 surgeries out of 309 of Total OT's for the month of April (25 days) was captured and observations were made.

Exclusion Criteria: All the OT's not falling under the above inclusion criteria were excluded i.e.18 OT's done on Sundays and 27 OT's which were not falling under the resource utilization time for OT (9am to 5 P m) was excluded. A total of 45 OT procedure not taken into the sample size (18 on Sundays + 27 not falling under the utilization hours).

Note:-In case of any OT starting between the given time frame but ending late i.e. After 5 pm, the utilization hours were calculated only till 5pm for an apt analysis . In the same way any OT starting before 9 am and continuing for later hours, the utilization time was calculated from 9 am only.

The OT list was generated before, or by 5 pm for the next day, and was circulated amongst the concerned doctors and staff.

The OT timing scheduled for elective cases was from 09:00 hrs-17:00 hrs. (8 hours ie.480 min/day) for all the 5 OT's.

Operational Definition

OT utilization is defined by Donham et al as the quotient of hours of OT time actually used during elective resource hours and the total number of elective resource hours available.

Ethics

Prior approval for the analysis was acquired from the Ethics Committee of the hospital , and patient information was kept confidential during the audit.

Implication of the Research

The operating room normally consumes for about an approximate value of around 8-10 % of the total hospital's budget [1]. Previously, the OT's only needed to be used for around 20-25 % of the time to make profits. However, in the last 25 years, OT's environmental economics has altered drastically. Low invasive surgery, that requires expensive technology, and discounted fee-for-service has all sliced the surgical margins drastically.

As a result, it's not unexpected that many hospitals have designated this area as a cost-cutting zone. For long-term success, every one of us who work in the OT must be cost-effective and productive. To achieve these objectives, trustworthy data is required to assist multiple stakeholders, including the financial officer, nurses, surgeons, and anesthetists, who must all work together to achieve the smooth-running process of the OT and the required efficiency.

Traditional OT management approaches must be examined. Traditional utilization metrics that focus solely on the amount of time patients spends in the operating room (OT) rewards the surgeons for occupying OT but ignores cost efficiency and productivity. The "utilization" of the OT is one indicator of its effectiveness. The operation theatre scheduling is a major factor in improving the efficiency of the operation theatre.

Chapter 4-Results and Analysis

All over there were a total of 309 OT's done in the month of April (including 4 Sunday's for the month). In the sample size for this study only those OT happening on the working days i.e. from (Monday to Saturday) and commencing from 9 am to 5 pm was included . A sample size of 264 surgeries out of 309 surgeries for the month of April (25 days) was captured and observations were made. The resource OT hours were taken from 9 am to 5 pm i.e. 8 hrs. / day for 25 days which makes it to be 12,000 min (8*60*25) for 25 days.

Department	Total OT	Planned OT	Unplanned OT	Re-exploration/ Surgery Modification/Re-Schedule	Emergency	Planned %	Unplanned %	Re-exploration/Surgery Modification/Re-Schedule %
Anesthesia	1	1	0	0	0	100	0	0
Cardiac	37	37	0	0	0	100	0	0
ENT	13	12	1	0	0	92.3	7.69	0
Gastro	12	11	1	0	0	91.67	8.33	0
General	67	56	5	4	2	83.58	7.46	5.97
Gynae	4	4	0	0	0	100	0	0
Neuro	21	10	5	6	0	47.62	23.81	28.57
Oncology	17	15	1	1	0	88.24	5.88	5.88
Ortho	32	27	3	1	1	84.38	9.37	3.13
Plastic Surgery	12	12	0	0	0	100	0	0
Urology	35	26	7	2	0	74.29	20	5.71

Vascular	13	8	3	1	1	61.54	23.08	7.69
Total	**264**	**219**	**26**	**15**	**4**	**82.9**	**9.85**	**5.68**

Table 4.1: No. and percentage of planned, unplanned, (Emergency and Re-exploration/Surgery Modification/Re-Schedule) speciality wise surgeries.

The above table shows that there were all together 264 surgeries performed during the period of study, that happened within the resource hours of OT i.e. (9 am to 5pm) out of which 219 surgeries were planned , 26 were unplanned, 4 were emergency surgeries and 15 surgeries were either re-exploratory surgeries , Re-modified surgeries or Re-scheduled surgeries, that accounts for 82.95 % were planned and about 17.05 % surgeries fell into the other heads mentioned above.

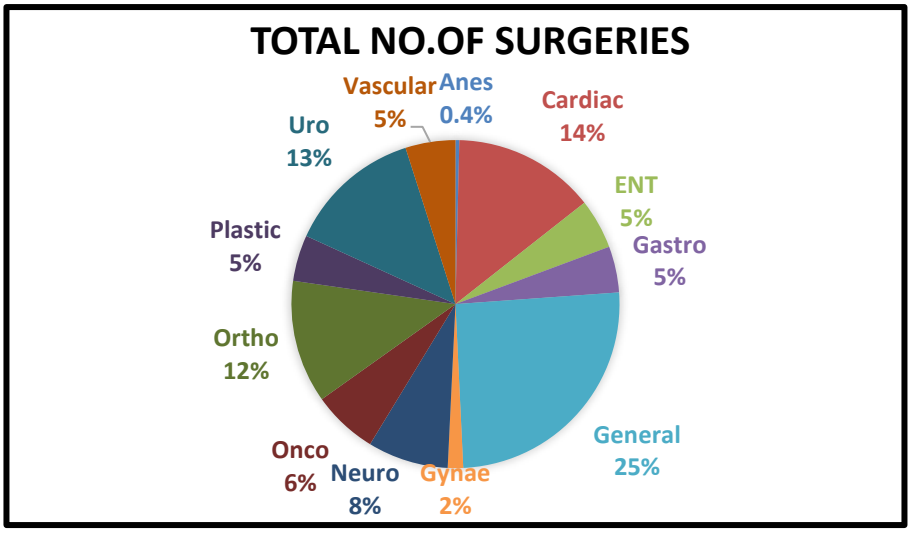

Figure 4.1: Percentage distribution of total surgeries, carried out in the resource hours for OT between April 1st, 2022 to 31st April 2022

Out of the total surgeries performed in the study period, 64% surgeries were performed under the speciality of General surgery, Cardiology, Urology and Orthopedics. With the remaining speciality accounting for about 34% including Gastro surgery, gynecology, Neurology, Oncology, Plastic Surgery, ENT and anesthesiology.

The most no of surgeries were performed under the speciality of general surgery with a percentage of about 25 % with Lap cholecystectomy being the most performed procedure under it. Following General surgery, Cardiology department accounted for about 14 % of the total surgery with CABG being the most performed procedure.

Urology accounted for 13% of the total surgeries with URSL being the most performed procedure. Orthopedics accounted for about 12% of the total surgeries with TKR being the most performed surgery.

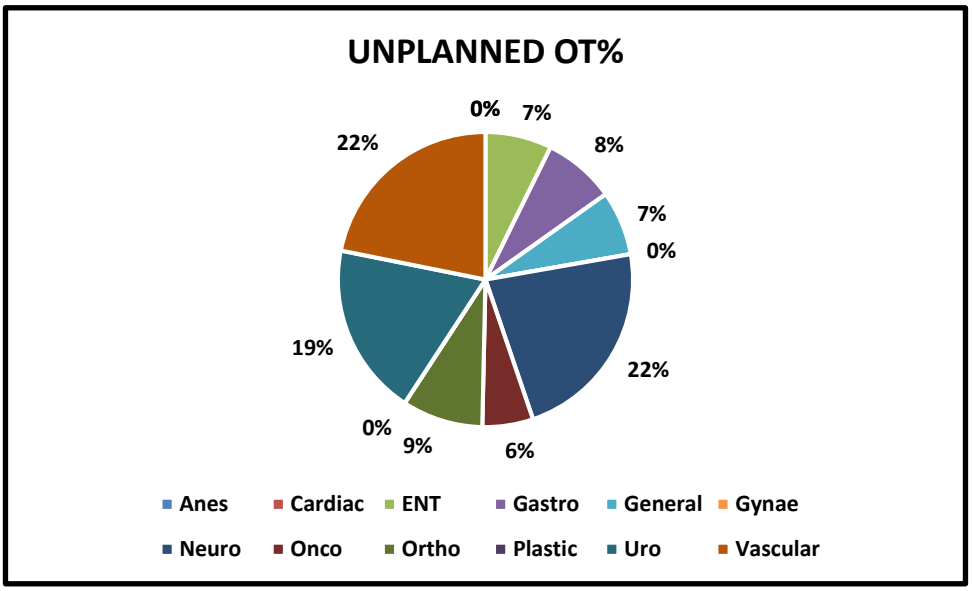

Figure .4.2 Unplanned Surgeries % speciality wise

The above graph shows that out of 264 surgeries that happened in the study period between the resource hours from 9:00 am to 5:00 pm, 66.89% of the unplanned surgeries were from Neurology, Vascular Surgery and Urology department with the remaining of 33.11% unplanned surgeries from ENT, Gastroenterology ,General Surgery, Oncology and Orthopedics department.

The most cases of unplanned surgeries were from Vascular Surgery and Neurology department which were about 23.08% and 23.81 respectively, followed by Urology accounting for 20 %, Orthopedics 9.38%, Gastroenterology 8.33%, ENT 7.69%, General surgery 7.46%, and Oncology 5.88.

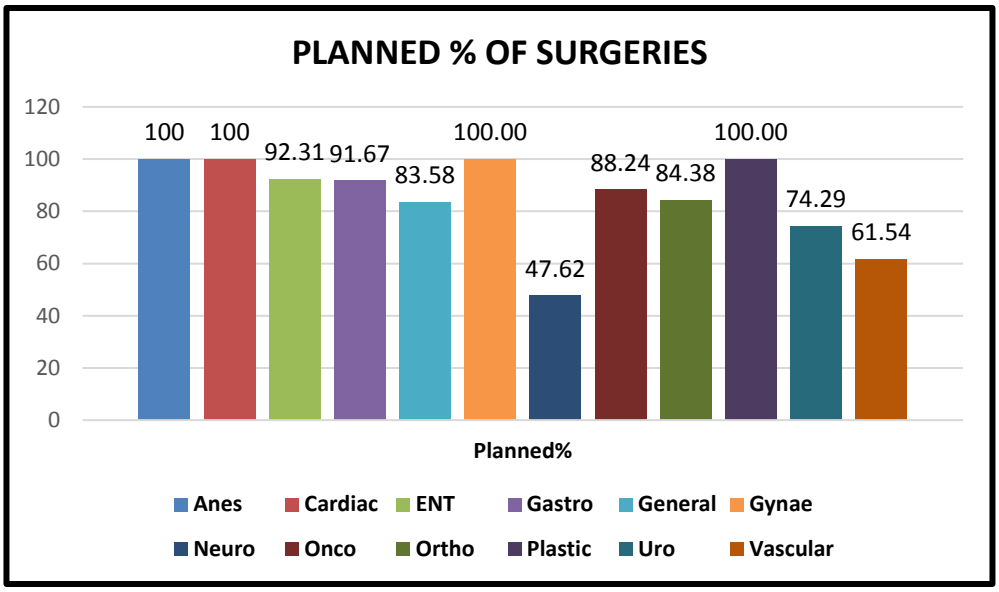

Figure.4.3 : Percentage distribution of total speciality wise planned surgeries

Out of all the surgeries happening during the study Anesthesia, Cardiac Surgery, Gynecology and Plastic Surgery showed a 100% planned OT rate, followed by ENT showing 92.3% planned surgeries, 91.67 % for Gastroenterology, 88.24% for oncology, 84.38% for Orthopedics, 83.58% for general surgery, 74.29% for Urology and 61.54% for Vascular surgeries.

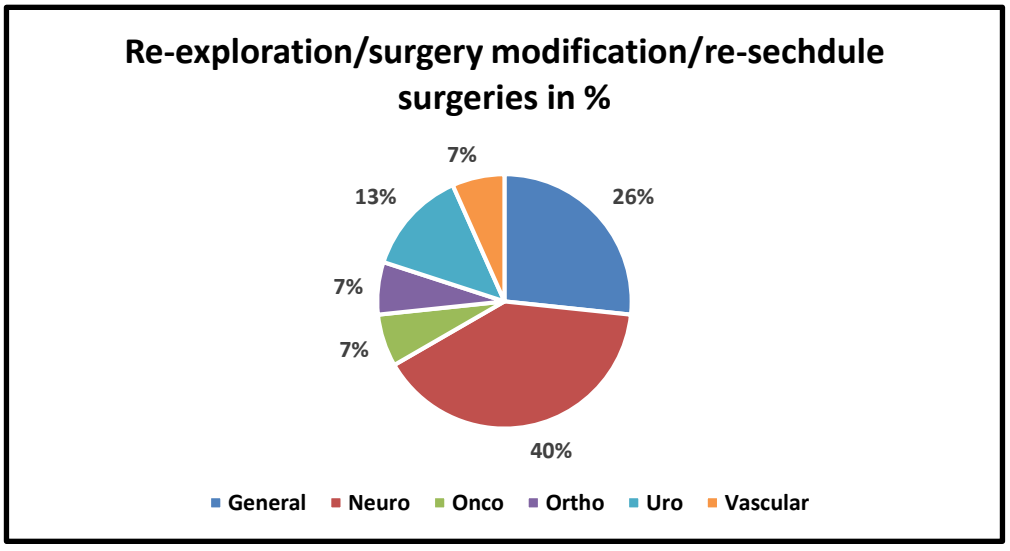

Figure.4.4:Percentage of re-exploratory-scheduled and modifications in surgery speciality wise

The above graph shows that majority of the re-exploratory /re-scheduled or surgical modification was done in Neurology department that accounts for about 40%, followed by

General Surgery accounting for about 26.67%, Urology accounting for about 13.33 %, and Vascular surgery, Oncology and Orthopedics accounting for about 6.67 % each.

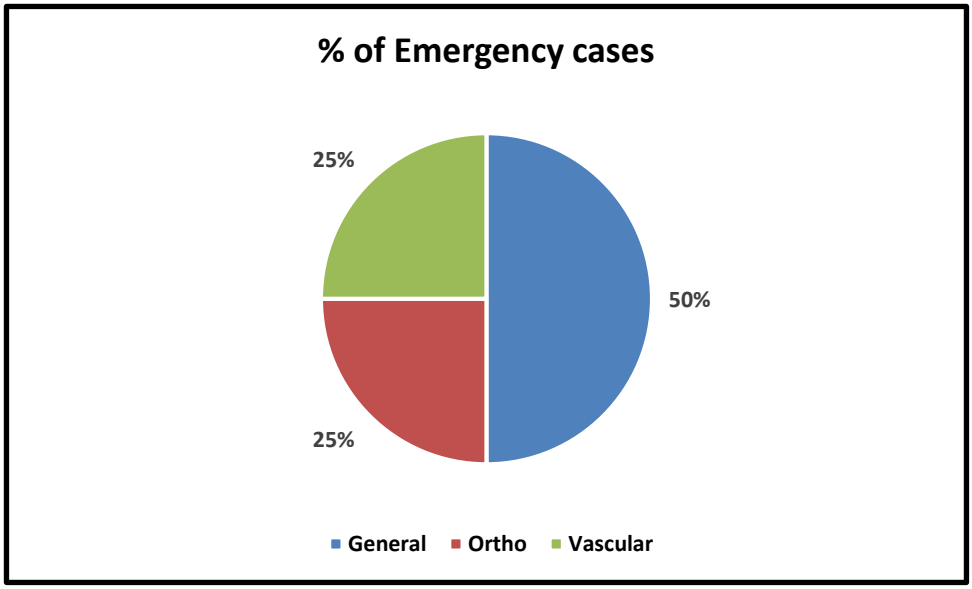

Figure.4.5:Percentage of emergency cases speciality wise

Majority of the emergency cases for about 50% were done by Vascular surgery department followed by General surgery and Orthopedics showing 25 % each.

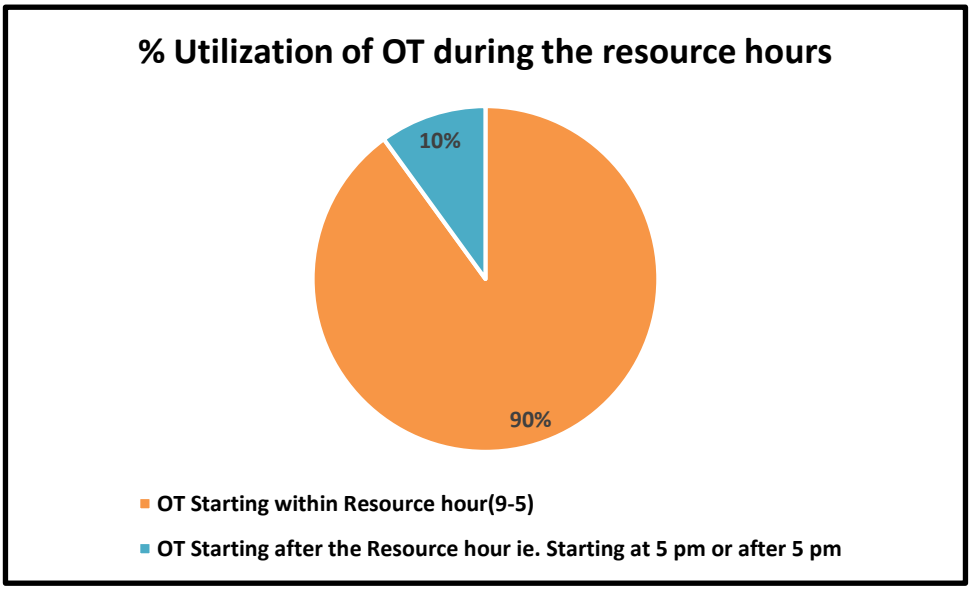

Figure.4.6: Utilization of OT during resource allocated OT hours

There were a total of 291 Surgeries taking place from 1st of April 2022 to 31st of April 2022 excluding 4 Sundays and a holiday off out of which there were about 264 surgeries that took place between 9 am to 5 pm, rest remaining of about 27 surgeries took place after 5 pm, which clearly showed that 90% of the surgeries were starting within the resource hours and rest 10% were happening after the resource hours.

It was also seen that average OT shift in time was around 1 pm and Shift out time was around 3:20 pm.

Delay in OT start time

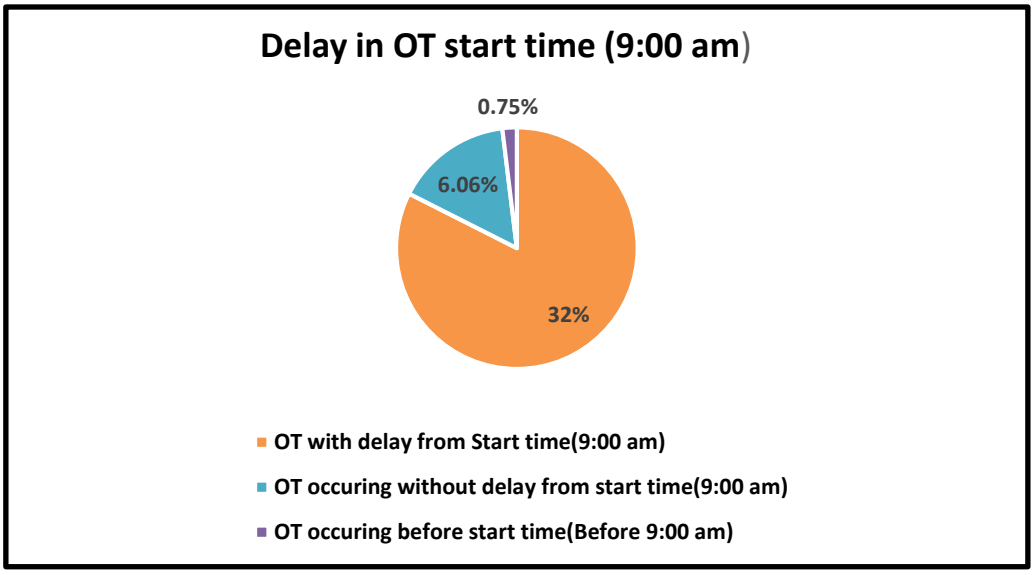

Figure.4.7: Delay in OT start time

Average delay in OT start time from 9:00 am as ideal the OT start time	Time in hh:mm
OT 1	01:25
OT 2	01:47
OT 3	01:04
OT 4	01:55
OT 5	00:53

Table 4.2: Average delay in different OT

Out of 264 surgeries occurring between the resource hours of 9 am to 5 pm, about 85 surgeries that is about 32 % of surgeries showed a delay in start for the day for OT. Only about 16 surgeries i.e. 6.06% of the surgeries started at 9:00 am and 2 surgeries i.e. 0.75% of surgeries started before time.

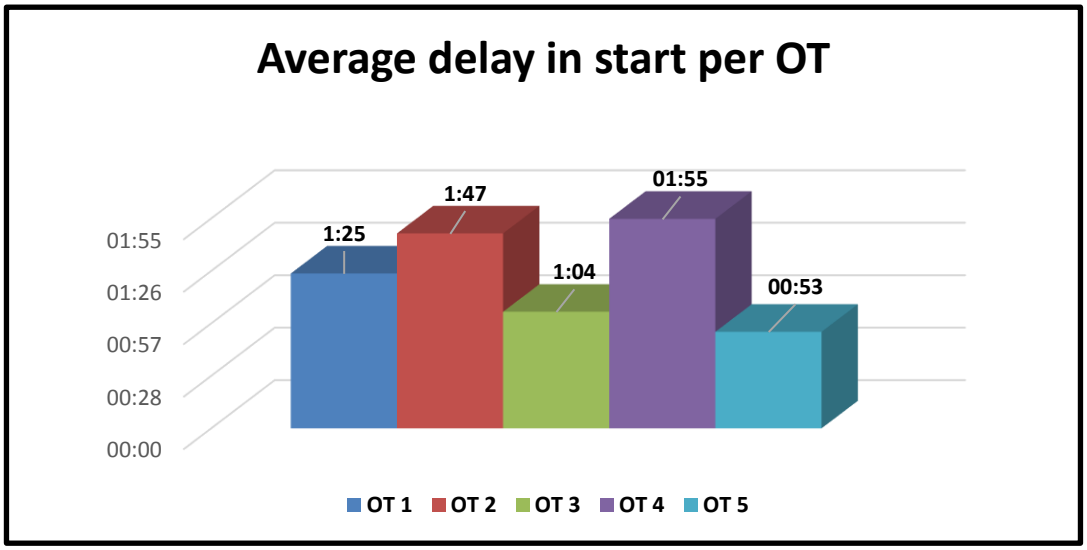

Figure.4.8: Average Delay in start per OT

The above represented data clearly shows that OT 4 had the maximum delay in OT start time with a delay of about 1 hr 55 min i.e. approximately a delay of 2 hr from ideal OT start time of 9:00 am. OT 2 showed a delay of 1 hr 47 min, followed by OT 1 with a delay of 1 hr 25 min, OT 3 with a delay of 1 hr 4 min and OT 5 with a delay of around 53 min.

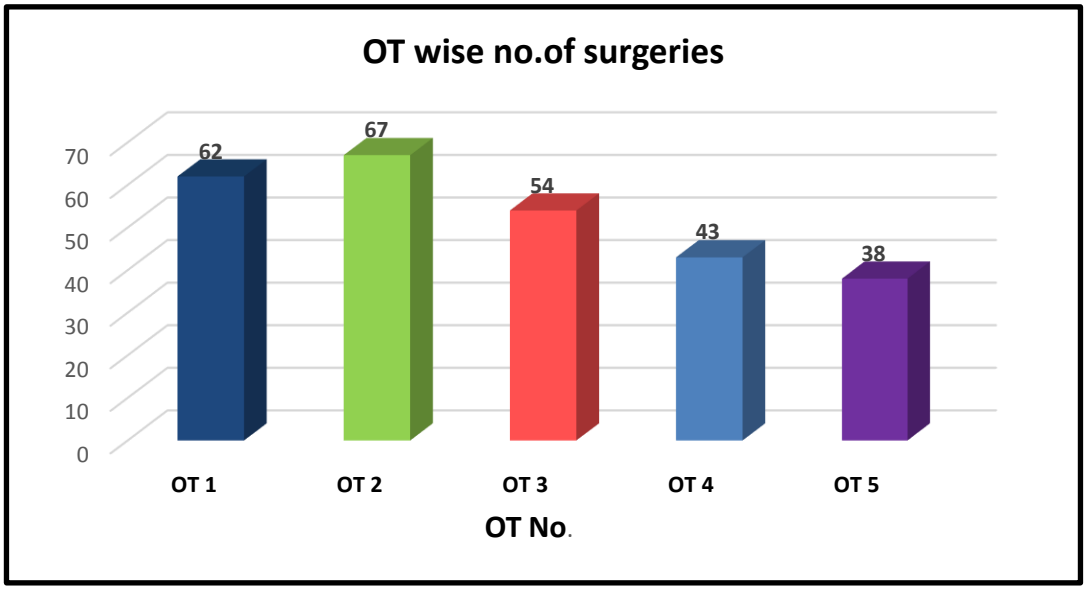

Figure.4.9 : OT wise no of surgeries

The highest no of surgical procedures happened in OT 2 with 67 surgeries, followed by OT 1 having 62 surgeries, OT 3 with 54 surgeries, OT 4 with 43 surgeries and OT 5 with 38 surgeries.

Resource hours for OT utilization

Resource hours for all OT available i.e.(6 OT) were taken to be **8 hours** each that is **480 minutes** per day. For the total study period ie.25 days the resource hour available were 8*60*25 i.e. **12,000 min.**

OT no.	Total Procedure	Total Resource hour available (hrs.)	Total Resource hour available (min)	Average time, for surgeries	Hours utilized (Planned+ Unplanned) including OT Cleaning time (min)	Hours not utilized (Planned +Unplanned) (min)	%Utilized	%Not Utilized
OT 1	62	8	12000	126	7815	4185	65.13	34.88
OT 2	67	8	12000	92	6174	5826	51.45	48.55
OT 3	54	8	12000	130	7017	4983	58.48	41.53
OT 4	43	8	12000	131	5622	6378	46.85	53.15
OT 5	38	8	12000	206	7830	4170	65.25	34.75

Table 4.3: Percentage distribution of total speciality wise planned surgeries

The cleaning utilization times after every OT procedure was included in the utilization time only for majority of the cases.

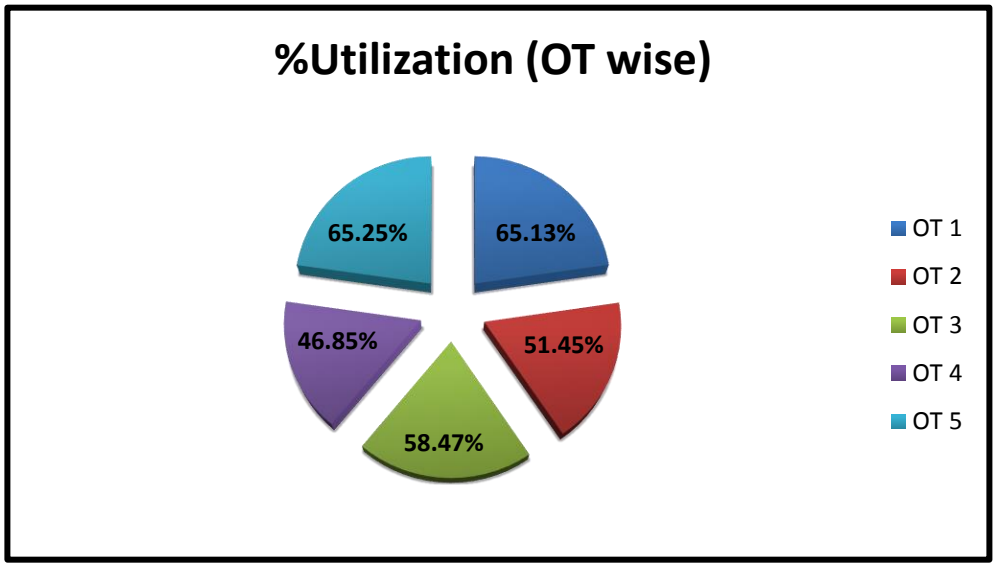

Figure.4.10: % Utilization of different OT's

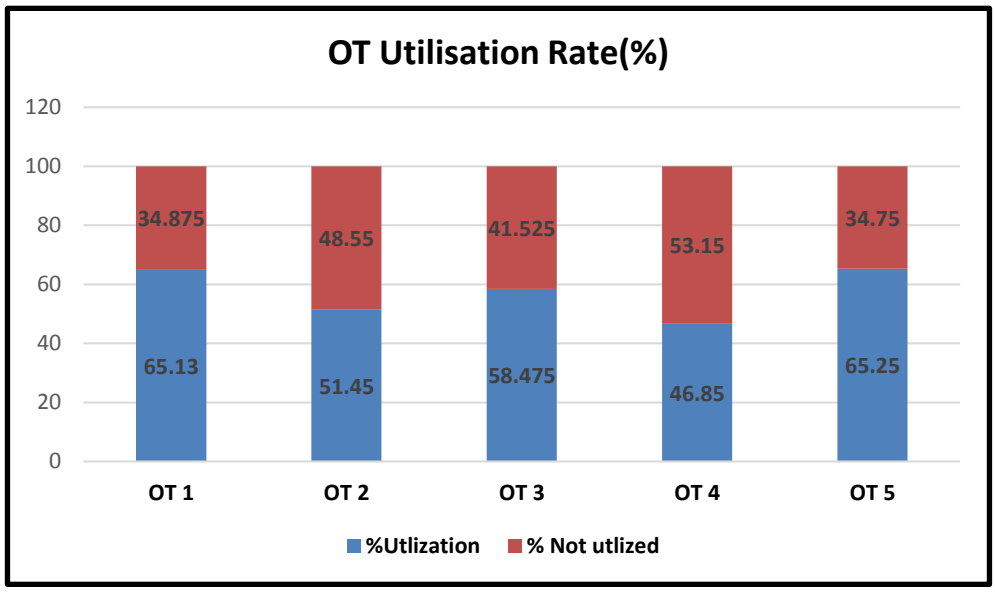

Figure.4.11: Distribution of OT hours utilized and not utilized

The above graph shows the percentage of utilization versus Non utilization of the 5 different OT's in the study period. It clearly Shows that OT 1 and 5 were utilized the most in the resource hour i.e. for about 65% each approximately. OT 4 was utilized for about 53%, followed by OT 2 about 48 %. OT 3 was the least utilized OT with a utilization rate of 41% out of all the OT.

Speciality wise OT utilization

Department	Total cases	Total time utilized(planned +unplanned) in min	Resource OT time in min	OT utilization(%)
Anesthesia	1	20	12000	0.17
Cardiac	37	7770	12000	64.75
ENT	13	1520	12000	12.67
Gastroenterology	12	756	12000	6.3
General	67	7309	12000	60.91
Gynecology	4	365	12000	3.04
Neurology	21	3517	12000	29.31
Oncology	17	2775	12000	23.13
Orthopedics	32	4376	12000	36.47
Plastic Surgery	12	1180	12000	9.83
Urology	35	3605	12000	30.04
Vascular	13	1265	12000	10.54

Table 4.4: %Utilization of OT speciality wise

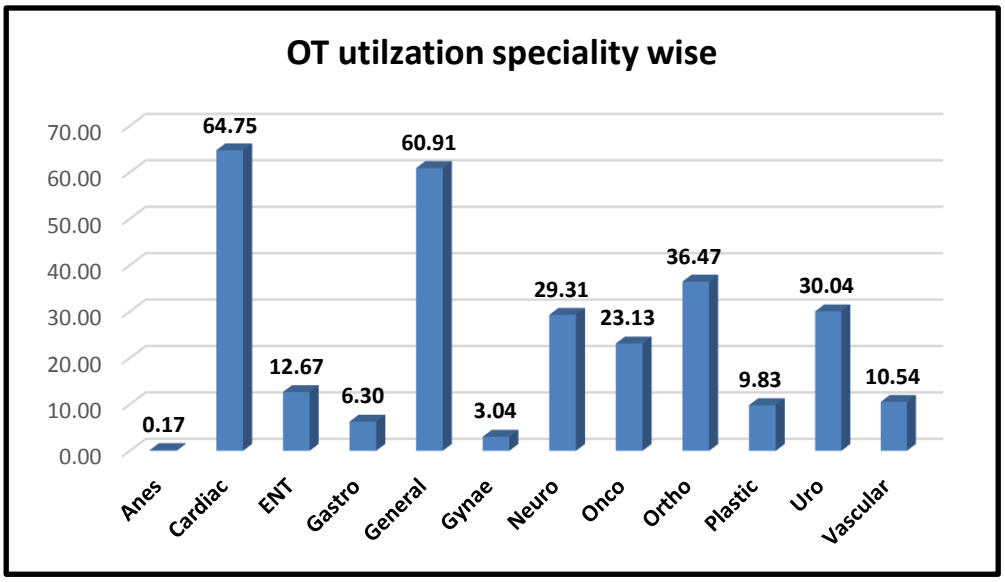

Figure.4.12: % of OT utilization speciality wise

The above graph clearly shows that Cardiac and General Surgery department are using the OT most for about 64.5% and 60.91 percent respectively. Department of Orthopedics shows a utilization rate of about 36.47%, followed by Urology, 30.04%, Neurology 29.31%, Oncology 23.13 %, ENT 12.67%, Vascular surgery 10.54 %, Plastic surgery 9.83%, Gastroenterology 6.30%, Gynecology 3.04 and Anesthesia 0.17 %.

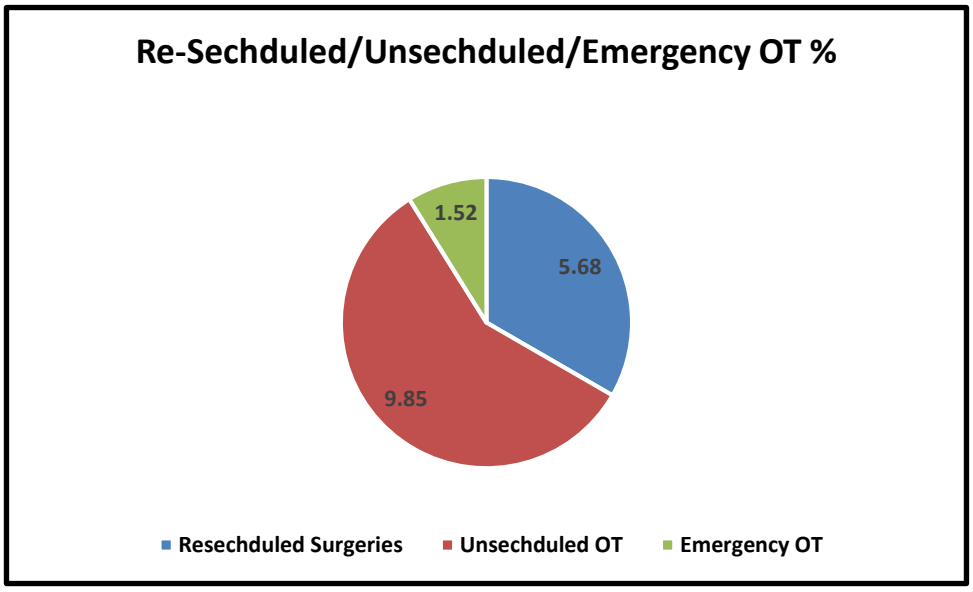

Figure.4.13: Re-scheduled/un-scheduled/emergency OT %

Out of the total 264 surgeries, 9.85% of the cases were unscheduled , from which Urology department had the most unscheduled cases. Emergency OT's accounted for about 1.52 % of the total surgeries and re-scheduled OT's accounted for about 5.68% of the total surgeries. Following were the most common reasons for the re-scheduled surgeries:-

- Approval issues
- Patient unfit for surgeries
- Surgeon not free
- Surgery modifications
- Unavailability of the OT slot

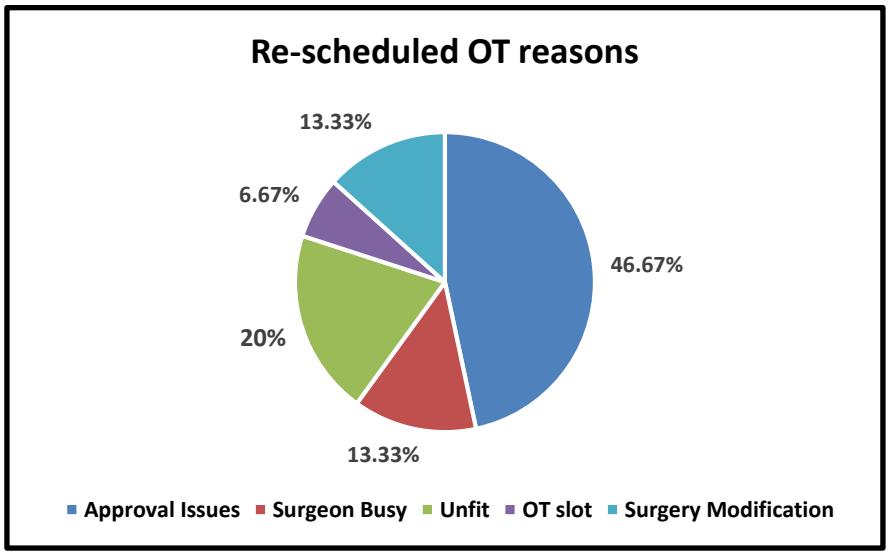

Figure.4.14: Re-scheduled OT reasons

Chapter 5-Disscussion

A well-organized OT department is an essential element of any hospital. Excellent management is required to satisfy patients, requirements of the operating surgeons and OT staff, for a proper and smooth functioning of OT. [7] To function properly in any hospital, OT requires a significant amount of resources. To improve surgical management in any hospital, OT must be utilized well and managed properly. Proper management of OT is dependent on the provision of a variety of medical care and services, such as the equipment used in various day to day processes of hospital, medications, timely management of various services, sterilization practices, and management of proper infection control rate.

Delays in commencing of the OT's on time results in poor utilization of available resource hours. This issue can be managed by improving the intra and inter departmental communication between the patient and the surgeon which will make the patient fully understand the pre-operative instructions. A good and timely level of communication between the OT nurses and the ward nurses will also save a lot of time and help in the smooth shifting for any planned surgery from wards to OT. Case scheduling is an integral part and can help to reduce the number of cancellations. The presence of an OT manager may help in the proper and efficient planning of cases for different OT's thereby reducing case cancellations , leading to better utilization of OT.

To keep a check on the efficiency of OT a thorough study of the available resource hours, no of procedures taking place in the resource hours and keeping a timely updated OT list are few important parameters to start with. The variations in different types of surgeries and procedure leads to variability of case duration which in turn makes predicting actual utilization of the OT more difficult. Even in regular day to day operations, the actual start time of the patient is unknown. Each and every patient is unique, because of which the time duration for any operation can never be anticipated. This clearly means , that the actual case start time of a patient after the first case for the day cannot be predicted for the upcoming procedures and surgeries lined up for the same day.

If proper scheduling and planning of cases is done in accordance to the available resource hours along with a proper communication process between the anesthesiologists, surgeons, nurses and patients etc. the efficiency of the process will improve leading to an improved

OT utilization. Timely audits would also help one to find the issues and analyze the resource hours of OT utilization of various speciality and different OT.

Patient being shifted late from the ward is one the most common and prevalent cause for any delay in commencing the operative procedure, followed by administrative issues, the patient's medical state, and the operating surgeon reporting late [9].

The most common causes for cancellation or re-scheduling were approval issues, surgeon being busy, unavailability of the OT Slot , patient being unfit for surgery because of the patient's medical reasons or conditions, the patient's refusal to be admitted, a last-minute modification in the plan of surgery , and issues related to administration such as linen and sterilized equipment not being available on time. Various reasons for postponement of scheduled cases included the absence of a senior surgeon, and unavailability of ICU beds etc.

Most reasons for surgery cancellations, re-scheduling and delays may very well be avoided if efforts are made to avoid surgery cancellations through careful planning and efficient use of personnel and materialistic resources (medications, sterilization, linen etc.). Delays in the start of the OT in the mornings waste a significant amount of useful OT time and result in surgery cancellations later in the day or overlapping with the time duration of other surgical procedures, reducing daily OT utilization. As a result, on the night before surgery, appropriate communication among the surgeon, anesthetist, and nursing staff can help avoid morning delays.

Maintaining a designated theatre for emergency treatments helps save room turnover time and prevent unplanned or re-scheduled cases due to last-minute emergency patients. Pre-operative preparations for blood or blood related products, medications, ICU beds availability, important instruments, as well as sufficient staffing and proper pre-anesthetic assessment and correct patient screening , can work in long run towards minimizing the 11^{th} hour cancellations.

Chapter 6 - Conclusion

From the above study it can be concluded that out of the total of 264 surgeries performed during the study period that happened within the resource hours of OT i.e. (9 am to 5pm) 82.95% of the surgeries were planned, 11.87% were unplanned and 5.18 % were emergency OT's.

OT 1 and OT 5 were utilized the most in the resource hour i.e. For about 65% each approximately. OT 4 was utilized for about 53 %, followed by OT 2 about 48 %. OT 3 was the least utilized OT with a utilization rate of 41% out of all the OT.

It clearly shows that the scheduling of OT needs improvement. The OT start for the day should not be delayed, it should start positively by 9 am for a proper utilization of time and avoid any wastage of time. The more predictable cases should be scheduled sooner to optimize operating room efficiency and scheduling, giving more time for surgeries that may require more time.

The most common reasons identified for re-Scheduled surgeries were Patient unfit for surgery, surgeon not free, surgery modifications , unavailability of the OT slot.

It was recommended that proper scheduling of the OT slots, no delay in start of the OT, regular audits , grouping of the OT's speciality wise, timely availability of instruments, services like sterilization, proper and timely communication with the Wards and ICU regarding the OT scheduling and live OT tracking software can be implemented to increase the efficiency of OT utilization.

If a slot is vacant, it should be investigated to see if another doctor can fill it, or it should be coordinated with the staff to check into scheduling and determine why that slot was left vacant or which surgery was cancelled.

Improving OT efficiency

1. Giving timely reminder to surgeons for reserving/booking or freeing the OT time slot in beforehand.

Giving a reminder to surgeons and their coordinators to free up the OT slots that they are not intending to use is one of the simplest ways to enhance operating room usage. If a surgeon arrives late, they should not be given the chance to start with the first OT slot for the day, it will maintain strictness amongst them and will save time for other minor surgeries which can be used in major OT's**.** One of the most important factors that might impact the proper utilization and efficiency of the Operation Theater is the timing of scheduling any surgery in relation to the actual day of surgery [4].

2. Expand the scope of transparency in the board.

Simply informing a surgeon that their OT utilization is low and that they would have to improve or manage it would be ineffective because many times factors beyond their control have a detrimental impact on their metrics. [8].Having clear cut top-level performance goals and metrics, and making sure that everyone is informed about it, goes a far long way towards motivating employees in order to work towards the same and achieve more and more with time.[8]

3. Grouping of OT's

It is recommended to group the different OT's speciality wise depending upon the utilization in order to streamline the different procedures in dedicated OT which will avoid any clash with other planned procedures.

Department	OT utilization	OT no.
Cardiac	64.75	OT 1
General	60.91	OT 2
Gastroenterology	6.3	OT 2
ENT	12.67	OT 2
Neurology	29.31	OT 3
Orthopedics	36.47	OT 3
Plastic Surgery	9.83	OT 3
Urology	30.04	OT 4
Vascular Surgery	10.54	OT 4

Onco Surgery	23.12	OT 5

Table 6.1: Grouping of OT speciality wise

In my view, Cardiac surgery should be given a dedicated OT due to its high utilization rate. General Surgery and Gastroenterology can be grouped together as OT 2. Neurology, Orthopedics and Plastic surgery can be grouped together as OT 3. Urology and Vascular Surgery can be grouped under OT 4 and Onco surgery can be grouped under OT 5.

One dedicated OT should be made for emergency OT's like general trauma, head injury, burns etc. And only emergency cases and procedures should be allowed to be performed there.

4. Pre-Operative (Pre-op) /Post-Operative (Post-op) ward

Both the pre-operative and post-operative ward should be there on the same floor as that of the OT, to reduce shifting time from ward to OT due to lift issue or any other shifting problem .

Patient should be shifted in the pre-op ward or on the same floor a day before his/her OT. This will help in cutting of extra time due to any issue and a quick shifting with full preparation to the OT in time.

5.Live OT Tracking Software

Large monitors showing the update about the ongoing OT with the patients respective UHID's can be displayed in all the important places like ICU, waiting rooms so that an update is given to the families of the patient and concerned staff . It will not only streamline the process of OT allocation to different surgeons but also help the hospital staff in preparing the next patient beforehand for their surgery. It will help in real time tracking of patients.

This live tracking tool will make the surgery experience more efficient by letting all the care providers or the medical personnel in every department monitor the patient's current status, location and other pertinent information. It will improve inter- and intra-departmental communication and also help in reducing the number of calls made between departments.

Quick overview for ways to improve operating room utilization

- Pre-released OT schedule
- Improve first case on-time start
- Implement a pre-operative checklist
- Minimize delays and case cancellations
- Collect data and leverage analytics
- Monitor OR activities and quality indicators
- Streamline workflows and procedures
- Build a time-sensitive culture and track surgeon utilization
- Prepare patient for surgery before hand
- Live OT tracking software

It can be at last concluded that the operation theatre (OT) complex is a high-cost item in a hospital's budget. To achieve the best cost-benefit ratio, this sector of hospital must be utilized to the fullest extent possible. To achieve an adequate level of utilization in the OT, a number of activities and workers must be coordinated effectively.

In short inefficient utilization of operating facilities is caused by delays in OT starts, poor-scheduling or under scheduling, interruptions related to emergency surgeries procedures, administrative reasons, pre-operative patient preparation and a poor communication gap between the medical personnel.[9]

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9. 3. K V, N A, M R. Audit of operation theatre utilization in general surgery [Internet]. Pubmed. 2022 [cited 21 June 2022]. Available from: https://pubmed.ncbi.nlm.nih.gov/11558108/

Annexures

OT List April 2022													
SR. NO.	DATE	DAY	OT	AGE/GENDER		NAME OF SURGERY	DEPT.	Time IN	Time OUT	elay in OT start Tim	Raw utilization	Utilization in min	-SCHEDULED/SCHEDULED/RE-SCHEDUL
1	1-Apr-2022	Friday	Main OT 1	22Y(s)/Male	VC	PROCTOCOLECTOMY	GENERAL	09:46	15:30	00:46	05:44	344	RE-SCHEDULED due to Approvalllll
2	1-Apr-2022	Friday	Main OT 2	27Y(s)/Male	VC	PILONIDAL SINUS	GENERAL	11:46	13:00	02:46	01:14	74	RE-SCHEDULED due to Approvalllll
3	1-Apr-2022	Friday	Main OT 2	35Y(s)/Female	VC	THYROIDECTOMY	GENERAL	13:26	15:14		01:48	108	RE-SCHEDULED due to Approvalllll
4	1-Apr-2022	Friday	Main OT 1	38Y(s)/Male	IN HOUSE	EUA	GENERAL	15:32	16:05		00:33	33	UN-SCHEDULED
5	1-Apr-2022	Friday	Main OT 3	44Y(s)/Female	IN HOUSE	PITUTARY TUMOR	NEURO	09:20	13:30	00:20	04:10	250	
6	1-Apr-2022	Friday	Main OT 4	36Y(s)/Male	IN HOUSE	THR	ORTHO	09:15	13:30	00:15	04:15	255	
7	1-Apr-2022	Friday	Main OT 3	64Y(s)/Male	IN HOUSE	ERCP	GASTRO	14:20	15:26		01:06	66	
8	1-Apr-2022	Friday	Main OT 2	32Y(s)/Male	VC	CLT	UROLOGY	16:14	17:00		00:46	46	UN-SCHEDULED
9	1-Apr-2022	Friday	Main OT 5	34Y(s)/Male	IN HOUSE	DVR	CARDIAC	14:00	17:00		03:00	180	
10	1-Apr-2022	Friday	Main OT 5	27Y(s)/Female	IN HOUSE	MVR	CARDIAC	09:00	11:00	No delay	02:00	120	
11	1-Apr-2022	Friday	Main OT 5	72Y(s)/Female	IN HOUSE	POPLITEAL BYPASS	CARDIAC	11:00	12:00		01:00	60	
12	4-Apr-2022	Monday	Main OT 1	54Y(s)/Male	IN HOUSE	COMMANDO WITH FREE F	ONCO	11:44	19:44		05:16	316	
13	4-Apr-2022	Monday	Main OT 4	59Y(s)/Male	IN HOUSE	EXTERNAL FIXATOR	ORTHO	09:35	12:16	00:35	02:41	161	
14	4-Apr-2022	Monday	MaIn OT 4	61Y(s)/Female	IN HOUSE	BIPOLAR	ORTHO	14:45	17:16		02:15	135	UNSCHEDULED
15	4-Apr-2022	Monday	Main OT 4	37Y(s)/Male	IN HOUSE	DISECTOMY	NEURO	14:15	16:16		02:01	121	
16	4-Apr-2022	Monday	Main OT 3	38Y(s)/Female	IN HOUSE	BRAIN TUMOR	NEURO	09:16	12:30	00:16	03:14	194	RE SCHEDULED...SURGEON NOT FREE
17	4-Apr-2022	Monday	MaiN OT 2	32Y(s)/Female	IN HOUSE	ERCP	GASTRO	13:12	14:15	04:12	01:03	63	
18	4-Apr-2022	Monday	Main OT 5	75Y(s)/Female	IN HOUSE	CABG	CARDIAC	09:00	12:00	No delay	03:00	180	
19	4-Apr-2022	Monday	Main OT 5	49Y(s)/Male	IN HOUSE	MVR	CARDIAC	16:40	19:20		00:20	20	
20	4-Apr-2022	Monday	Main OT 2	62Y(s)/Male	IN HOUSE	TRACHIOSTOMY	NEURO	15:12	15:30		00:18	18	UN-SCHEDULED
21	5-Apr-2022	Tuesday	Main OT 3	10Y(s)/Male	VC	SOFT TISSUE EXCISSION	GENERAL	13:00	14:30	04:00	01:30	90	
22	5-Apr-2022	Tuesday	Main OT 4	14Y(s)/Male	IN HOUSE	AR	ENT	11:30	13:45		02:15	135	
23	5-Apr-2022	Tuesday	Main OT 4	12Y(s)/Female	IN HOUSE	TYMPANOMASTOIDECTON	ENT	09:10	11:00	00:10	01:50	110	
24	5-Apr-2022	Tuesday	Main OT 3	26Y(s)/Male	IN HOUSE	PICK LINE	ANES.	14:00	14:20		00:20	20	
25	5-Apr-2022	Tuesday	Main OT 2	64Y(s)/Male	IN HOUSE	FISSURECTOMY LESSER	GENERAL	09:30	11:00	00:30	01:30	90	
26	5-Apr-2022	Tuesday	Main OT 2	49Y(s)/Male	IN HOUSE	I&D	GENERAL	11:15	12:10		00:55	55	
27	5-Apr-2022	Tuesday	Main OT 2	51Y(s)/Female	IN HOUSE	LAP.CHOLE	GENERAL	13:00	14:45		01:45	105	
28	5-Apr-2022	Tuesday	Main OT 1	47Y(s)/Male	IN HOUSE	COMMANDO WITH FREE F	ONCO	15:12	20:48		01:48	108	
29	5-Apr-2022	Tuesday	Main OT 5	71Y(s)/Male	IN HOUSE	CABG	CARDIAC	09:00	13:30	No delay	04:30	270	
30	5-Apr-2022	Tuesday	Main OT 5	45Y(s)/Female	IN HOUSE	MVR	CARDIAC	14:30	19:00		02:30	150	
31	6-Apr-2022	Wednesday	Main OT 1	80Y(s)/Male	IN HOUSE	TURP	UROLOGY	09:30	22:44	00:30	07:30	450	
32	6-Apr-2022	Wednesday	Main OT 1	81Y(s)/Male	IN HOUSE	SSG	PLASTIC	11:05	12:44		01:39	99	
33	6-Apr-2022	Wednesday	Main OT 1	27Y(s)/Female	IN HOUSE	LAP.NEPHRECTOMY	UROLOGY	14:00	16:30		02:30	150	
34	6-Apr-2022	Wednesday	Main OT 2	15Y(s)/Male	IN HOUSE	LAP.CHOLE	GENERAL	11:30	13:20		01:50	110	
35	6-Apr-2022	Wednesday	Main OT 2	67Y(s)/Male	IN HOUSE	B/L HERNIA	GENERAL	09:32	11:05	00:32	01:33	93	
36	6-Apr-2022	Wednesday	Main OT 2	52Y(s)/Male	IN HOUSE	TEP	GENERAL	14:00	16:12		02:12	132	
37	6-Apr-2022	Wednesday	Main OT 1	41Y(s)/Male	IN HOUSE	ESOPHAGEAL STENT	GASTRO	16:30	17:15		00:30	30	
38	6-Apr-2022	Wednesday	Main OT 3	42Y(s)/Female	IN HOUSE	BRAIN TUMOUR	NEURO	09:00	12:30	No delay	03:30	210	RE SCHEDULED-SURGEON BUSY
39	6-Apr-2022	Wednesday	Main OT 4	28Y(s)/Male	IN HOUSE	FEMUR PLATING	ORTHO	14:30	18:45	05:30	02:30	150	
40	6-Apr-2022	Wednesday	Main OT 3	66Y(s)/Female	IN HOUSE	DEBRIDMENT&FLAP	PLASTIC	16:00	17:15		01:00	60	
41	6-Apr-2022	Wednesday	Main OT 5	52Y(s)/Male	IN HOUSE	CABG	CARDIAC	10:00	15:00	01:00	05:00	300	
42	6-Apr-2022	Wednesday	Main OT 2	54Y(s)/Male	IN HOUSE	HERNIA	GENERAL	16:30	18:05		00:30	30	UN-SCHEDULED
43	6-Apr-2022	Wednesday	Main OT 3	83Y(s)/Male	IN HOUSE	EAR REPAIR	ENT	14:00	14:30		00:30	30	UN-SCHEDULED
44	7-Apr-2022	Thursday	Main OT 3	3Y(s)/Male	IN HOUSE	PALATOPLASTY	PLASTIC	09:00	10:30		01:30	90	
45	7-Apr-2022	Thursday	Main OT 4	2Y(s)/Male	IN HOUSE	PALATOPLASTY	PLASTIC	11:00	12:30		01:30	90	
46	7-Apr-2022	Thursday	Main OT 3	3M(s)/Male	IN HOUSE	LIP NOSE REPAIR	PLASTIC	13:00	14:16		01:16	76	
47	7-Apr-2022	Thursday	Main OT 3	3M(s)/Male	IN HOUSE	ANT REPAIR	PLASTIC	14:30	15:45		01:15	75	
48	7-Apr-2022	Thursday	Main OT 2	37Y(s)/Male	IN HOUSE	TYMPANOMASTOIDECTOMY	ENT	11:00	13:00		02:00	120	
49	7-Apr-2022	Thursday	Main OT 1	21Y(s)/Male	IN HOUSE	LAP.CHOLE	GENERAL	10:30	13:00	01:30	02:30	150	
50	7-Apr-2022	Thursday	Main OT 4	49Y(s)/Male	IN HOUSE	LAP.CHOLE	GENERAL	13:30	16:00		02:30	150	
51	7-Apr-2022	Thursday	Main OT 1	50Y(s)/Male	IN HOUSE	DEBRIDMENT	VASCULAR	14:00	15:00		01:00	60	
52	7-Apr-2022	Thursday	Main OT 5	51Y(s)/Male	IN HOUSE	DVR	CARDIAC	10:30	16:00		05:30	330	
53	8-Apr-2022	Friday	Main OT 3	57Y(s)/Male	IN HOUSE	CRANIOPLASTY	NEURO	10:30	12:00	01:30	01:30	90	
54	8-Apr-2022	Friday	Main OT 3	20Y(s)/Male	IN HOUSE	DEBRIDMENT	PLASTIC	12:30	16:00		03:30	210	
55	8-Apr-2022	Friday	Main OT 4	72Y(s)/Male	IN HOUSE	B/L TKR	ORTHO	09:00	16:00	No delay	07:00	420	
56	8-Apr-2022	Friday	Main OT 1	82Y(s)/Male	VC	LAP CHOLE	GENERAL	12:00	13:00		01:00	60	
57	8-Apr-2022	Friday	Main OT 2	34Y(s)/Female	IN HOUSE	LAP CHOLE	GENERAL	10:00	13:00	01:00	03:00	180	
58	8-Apr-2022	Friday	Main OT 2	23Y(s)/Female	IN HOUSE	URSL	UROLOGY	13:00	14:00		01:00	60	
59	8-Apr-2022	Friday	Main OT 1	31Y(s)/Male	IN HOUSE	URSL	UROLOGY	14:00	15:00		01:00	60	
60	8-Apr-2022	Friday	Main OT 2	55Y(s)/Male	IN HOUSE	DL	ONCO	14:00	15:00		01:00	60	UNSCHEDULED

61	8-Apr-2022	Friday	Main OT 1	48Y(s)/Male	IN HOUSE	CLAVICLE FIXATION GRAFT	ORTHO	09:00	11:30	No delay	02:30	150	UNSCHEDULED
62	8-Apr-2022	Friday	Main OT 1	79Y(s)/Male	IN HOUSE	DEBRIDMENT	VASCULAR	14:00	15:00		01:00	60	
63	9-Apr-2022	Saturday	Main OT 3	74Y(s)/Male	VC	B/L TKR	ORTHO	09:00	11:30	No delay	02:30	150	
64	9-Apr-2022	Saturday	Main OT 3	60Y(s)/Female	VC	U/L TKR	ORTHO	15:00	17:00		02:00	120	
65	9-Apr-2022	Saturday	Main OT 4	3M(s)/Male	IN HOUSE	ANT REPAIR	PLASTIC	10:00	11:00	01:00	01:00	60	
66	9-Apr-2022	Saturday	Main OT 2	62Y(s)/Male	VC	HERNIOPLASTY	GENERAL	11:30	12:30	02:30	01:00	60	
67	9-Apr-2022	Saturday	Main OT 4	71Y(s)/Male	IN HOUSE	TRACHEOSTOMY	ONCO	13:00	14:00		01:00	60	
68	9-Apr-2022	Saturday	Main OT 1	48Y(s)/Male	IN HOUSE	BNI	UROLOGY	13:00	14:00		01:00	60	
69	9-Apr-2022	Saturday	Main OT 1	48Y(s)/Male	IN HOUSE	URSL	UROLOGY	10:30	12:00	01:30	01:30	90	
70	9-Apr-2022	Saturday	Main OT 5	62Y(s)/Male	IN HOUSE	CABG	CARDIAC	08:00	14:00	Before start 1 hr	05:00	300	
71	9-Apr-2022	Saturday	Main OT 4	26Y(s)/Male	IN HOUSE	HUMERUS ORIF	ORTHO	14:00	16:00		02:00	120	
72	9-Apr-2022	Saturday	Main OT 1	62Y(s)/Male	IN HOUSE	THERICH WIRING	GENERAL	14:00	16:00		02:00	120	
73	9-Apr-2022	Saturday	MAIN OT 3	23Y(s)/Male	IN HOUSE	VASCULAR INJURY	VASCULAR	11:20	13:20		02:00	120	EMERGENCY
74	11-Apr-2022	Monday	Main OT 1	67Y(s)/Female	IN HOUSE	CA ENDO.	ONCO	09:30	13:46	00:30	04:16	256	
75	11-Apr-2022	Monday	Main OT 1	60Y(s)/Female	IN HOUSE	MRM	ONCO	14:45	17:30		02:15	135	
76	11-Apr-2022	Monday	Main OT 3	51Y(s)/Male	IN HOUSE	SPINE FIXATION	NEURO	09:00	14:00	No delay	05:00	300	
77	11-Apr-2022	Monday	Main OT 2	11Y(s)/Male	IN HOUSE	SUPRACONDYLAR	ORTHO	11:30	13:00		01:30	90	
78	11-Apr-2022	Monday	Main OT 4	45Y(s)/Female	IN HOUSE	ERCP	GASTRO	12:30	14:00	03:30	01:30	90	
79	11-Apr-2022	Monday	Main OT 5	69Y(s)/Male	IN HOUSE	CABG	CARDIAC	09:00	14:00	No delay	05:00	300	
80	11-Apr-2022	Monday	Main OT 5	67Y(s)/Male	IN HOUSE	CABG	CARDIAC	14:00	19:00		03:00	180	
81	11-Apr-2022	Monday	Main OT 2	38Y(s)/Male	IN HOUSE	MIPH	GENERAL	11:00	15:00	02:00	04:00	240	
82	11-Apr-2022	Monday	Main OT 2	70Y(s)/Female	IN HOUSE	FOR FOOT AMPUTATION	VASCULAR	15:30	16:30	No delay	01:00	60	
83	11-Apr-2022	Monday	Main OT 2	46Y(s)/Male	IN HOUSE	APPENDECTOMY	GENERAL	16:45	18:20		00:15	15	UN-SCHEDULED
84	11-Apr-2022	Monday	Main OT 2	32Y(s)/Female	IN HOUSE	LUMPECTOMY	GENERAL	16:00	17:30		01:00	60	UN-SCHEDULED
85	12-Apr-2022	Tuesday	Main OT 3	60Y(s)/Male	IN HOUSE	LAP.CHOLE	GENERAL	11:00	12:25	02:00	01:25	85	
86	12-Apr-2022	Tuesday	Main OT 2	30Y(s)/Female	IN HOUSE	LUMPECTOMY	GENERAL	10:30	11:20	01:30	00:50	50	
87	12-Apr-2022	Tuesday	Main OT 2	30Y(s)/Female	IN HOUSE	APPENDECTOMY	GENERAL	13:15	14:50		01:35	95	
88	12-Apr-2022	Tuesday	Main OT 1	52Y(s)/Female	IN HOUSE	LAP.CHOLE	GENERAL	11:30	13:30	02:30	02:00	120	
89	12-Apr-2022	Tuesday	Main OT 3	25Y(s)/Female	IN HOUSE	LAP.CHOLE	GENERAL	12:00	13:30		01:30	90	
90	12-Apr-2022	Tuesday	Main OT 4	69Y(s)/Male	IN HOUSE	CAROTID ARTRY REPAIR	VASCULAR	09:50	12:30	00:50	02:40	160	

91	12-Apr-2022	Tuesday	Main OT 1	58Y(s)/Male	IN HOUSE	TURP	UROLOGY	13:46	15:00		01:14	74	
92	12-Apr-2022	Tuesday	Main OT 3	27Y(s)/Male	IN HOUSE	HIP PLATING/SHOULDER P	ORTHO	15:10	17:30		01:50	110	
93	12-Apr-2022	Tuesday	MAIN OT 5	60Y(s)/Female	IN HOUSE	CABG	CARDIAC	09:20	13:30	00:20	04:10	250	
94	12-Apr-2022	Tuesday	Main OT 5	53Y(s)/Male	IN HOUSE	CABG	CARDIAC	13:30	18:10		03:30	210	
95	13-Apr-2022	Wednesday	Main OT 1	22Y(s)/Male	IN HOUSE	CRUSH INJURY	ORTHO	16:30	21:50		00:30	30	EMERGENCY
96	13-Apr-2022	Wednesday	Main OT 1	9Y(s)/Male	IN HOUSE	ORIF	ORTHO	10:35	13:00	01:35	02:25	145	
97	13-Apr-2022	Wednesday	Main OT 2	67Y(s)/Female	IN HOUSE	LAP.CHOLE	GENERAL	16:10	18:30		00:50	50	
98	13-Apr-2022	Wednesday	Main OT 1	29Y(s)/Male	IN HOUSE	EXP.LAPAROTOMY	GENERAL	13:40	16:45		03:05	185	EMERGENCY
99	13-Apr-2022	Wednesday	Main OT 2	36Y(s)/Female	IN HOUSE	SEPTOPLASTY	ENT	13:45	15:50		02:05	125	
100	13-Apr-2022	Wednesday	Main OT 2	37Y(s)/Male	IN HOUSE	RIRS	UROLOGY	09:40	11:25	00:40	01:45	105	SURGERY MODIFICATION ONLY DJ STEN
101	13-Apr-2022	Wednesday	Main OT 2	46Y(s)/Female	IN HOUSE	TAH	GYNE	11:50	13:20		01:30	90	
102	13-Apr-2022	Wednesday	MaIN OT 3	29Y(s)/Male	IN HOUSE	SPINE FIXATION	NEURO	08:40	12:30	efore start by 20 mi	03:30	210	
103	13-Apr-2022	Wednesday	Main OT 3	52Y(s)/Male	IN HOUSE	CERVICAL FIXATION	NEURO	13:16	15:50		02:34	154	RE-SCHEDULED DUE TO AAPROVAL
104	13-Apr-2022	Wednesday	Main OT 4	54Y(s)/Male	IN HOUSE	CRANIOPLASTY	NEURO	09:40	12:00	00:40	02:20	140	
105	13-Apr-2022	Wednesday	Main OT 4	70(s)/male	IN HOUSE	COMMANDO	ONCO	12:40	19:15		04:20	260	
106	13-Apr-2022	Wednesday	Main OT 3	18Y(s)/Male	IN HOUSE	RADUS PLATING	ORTHO	16:05	18:15		00:55	55	
107	13-Apr-2022	Wednesday	Main OT 5	65Y(s)/Male	IN HOUSE	CABG	CARDIAC	10:30	15:00	01:30	04:30	270	
108	14-Apr-2022	Thursday	Main OT 1	46Y(s)/Female	IN HOUSE	RADICAL HYSTRECTOMY	ONCO	11:00	13:45	02:00	02:45	165	
109	14-Apr-2022	Thursday	Main OT 2	50Y(s)/Male	IN HOUSE	URSL	UROLOGY	10:00	11:00	01:00	01:00	60	
110	14-Apr-2022	Thursday	Main OT 2	73Y(s)/Male	IN HOUSE	CYSTOSCOPY+ PROSTATE BIOPSY	UROLOGY	11:30	12:00		00:30	30	
111	14-Apr-2022	Thursday	Main OT 2	30Y(s)/Female	IN HOUSE	D&C	GYNE	12:20	13:10		00:50	50	
112	14-Apr-2022	Thursday	Main OT 2	60Y(s)/Female	IN HOUSE	VH	GYNE	12:45	15:30		02:45	165	
113	14-Apr-2022	Thursday	Main OT 3	42Y(s)/Female	IN HOUSE	TYMPANOMASTOIDECTOMY	ENT	09:00	12:00	No delay	03:00	180	
114	14-Apr-2022	Thursday	Main OT 3	63Y(s)/Male	IN HOUSE	NASAL CAUTERIZATION	ENT	12:30	13:00		00:30	30	
115	14-Apr-2022	Thursday	Main OT 4	53Y(s)/Female	IN HOUSE	LAP.CHOLE	GENERAL	09:45	12:05	00:45	02:20	140	
116	14-Apr-2022	Thursday	Main OT 1	36Y(s)/Male	IN HOUSE	LAP.CHOLE	GENERAL	14:20	16:00		01:40	100	
117	14-Apr-2022	Thursday	Main OT 1	60Y(s)/Male	IN HOUSE	TEP	GENERAL	16:00	18:45		01:00	60	
118	14-Apr-2022	Thursday	Main OT 4	29Y(s)/Male	IN HOUSE	UPER LIMP TRAUMA	VASCULAR	12:25	14:30		02:05	125	UN-SCHEDULED
119	14-Apr-2022	Thursday	Main OT 3	61Y(s)/Female	IN HOUSE	CRANIOPLASTY	NEURO	13:30	15:00		01:30	90	RE-SCHEDULED DUE TO APPROVAL
120	14-Apr-2022	Thursday	Main OT 2	66Y(s)/Female	IN HOUSE	VH WITH AP REPAIR	GYNE	16:00	18:30		01:00	60	

121	14-Apr-2022	Thursday	Main OT 5	65Y(s)/Male	IN HOUSE	CABG	CARDIAC	15:00	20:00		02:00	120	
122	14-Apr-2022	Thursday	Main OT 5	72Y(s)/Male	IN HOUSE	CABG	CARDIAC	10:00	14:15	01:00	04:15	255	
123	15-Apr-2022	Friday	Main OT 3	58Y(s)/Female	IN HOUSE	SPINE FIXATION	NEURO	10:00	13:00	01:00	03:00	180	
124	15-Apr-2022	Friday	Main OT 1	48Y(s)/Female	IN HOUSE	LAP CHOLE	GENERAL	09:00	11:00	No delay	02:00	120	
125	15-Apr-2022	Friday	Main OT 2	38Y(s)/Male	VC	FISTULECTOMY	GENERAL	14:30	15:30		01:00	60	
126	15-Apr-2022	Friday	Main OT 1	54Y(s)/Male	IN HOUSE	TEP	GENERAL	14:00	16:30		02:30	150	
127	15-Apr-2022	Friday	Main OT 4	30Y(s)/Female	IN HOUSE	BREAST LUMP	GENERAL	14:00	16:40		02:40	160	
128	15-Apr-2022	Friday	Main OT 4	50Y(s)/Female	IN HOUSE	BREAST LUMP	GENERAL	13:00	14:00		01:00	60	
129	15-Apr-2022	Friday	Main OT 3	70Y(s)/Male	IN HOUSE	B/L TKR	ORTHO	15:00	22:00		02:00	120	
130	15-Apr-2022	Friday	Main OT 4	48Y(s)/Female	VC	LAP.CHOLE	GENERAL	12:30	13:30		01:00	60	
131	15-Apr-2022	Friday	Main OT 2	58Y(s)/Male	VC	LAP.CHOLE	GENERAL	13:30	14:30	04:30	01:00	60	
132	15-Apr-2022	Friday	Main OT 1	48Y(s)/Male	IN HOUSE	PCNL	UROLOGY	09:00	11:00		02:00	120	
133	15-Apr-2022	Friday	Main OT 1	45Y(s)/Male	IN HOUSE	PCNL	UROLOGY	11:00	13:00		02:00	120	UNSCHEDULED
134	15-Apr-2022	Friday	Main OT 1	50Y(s)/Female	IN HOUSE	PCNL	UROLOGY	13:00	15:00		02:00	120	
135	15-Apr-2022	Friday	Main OT 5	61Y(s)/Male	IN HOUSE	CABG	CARDIAC	10:00	14:00	01:00	04:00	240	
136	15-Apr-2022	Friday	Main OT 5	62Y(s)/Male	IN HOUSE	CABG	CARDIAC	14:00	19:00		03:00	180	
137	15-Apr-2022	Friday	Main OT 5	15Y(s)/Male	IN HOUSE	PARMACATH INCERTION	VASCULAR	15:00	16:00		01:00	60	
138	15-Apr-2022	Friday	Main OT 4	54Y(s)/Female	IN HOUSE	CARPAL TUNAL	NEURO	10:30	11:30	01:30	01:00	60	UN-SCHEDULED
139	16-Apr-2022	Saturday	Main OT 1	40Y(s)/Female	IN HOUSE	CHEMO PORT	ONCO	10:30	12:30	01:30	02:00	120	
140	16-Apr-2022	Saturday	Main OT 1	70Y(s)/Female	IN HOUSE	ERCP	GASTRO	14:50	15:45		00:55	55	
141	16-Apr-2022	Saturday	Main OT 2	77Y(s)/Male	IN HOUSE	HERNIOPLASTY	GENERAL	11:00	13:00	02:00	02:00	120	
142	16-Apr-2022	Saturday	Main OT 1	54Y(s)/Male	IN HOUSE	OIU+CYSTOSCOPY	UROLOGY	10:30	11:30		01:00	60	SURGERY MODIFICATION BNI
143	16-Apr-2022	Saturday	Main OT 3	56Y(s)/Female	IN HOUSE	U/L TKR	ORTHO	09:30	11:45	00:30	02:15	135	
144	16-Apr-2022	Saturday	Main OT 3	62Y(s)/Female	IN HOUSE	B/L TKR	ORTHO	12:35	19:30		04:25	265	
145	16-Apr-2022	Saturday	Main OT 5	58Y(s)/Male	IN HOUSE	CABG	CARDIAC	10:00	14:00	01:00	04:00	240	
146	16-Apr-2022	Saturday	Main OT 5	4Y(s)/Female	IN HOUSE	PDA DEVICE CLOSURE	CARDIAC	15:00	18:00		02:00	120	
147	18-Apr-2022	Monday	Main OT 1	73Y(s)/Male	IN HOUSE	TURP+ORCHIODECTOMY	UROLOGY	10:45	12:30	01:45	01:45	105	
148	18-Apr-2022	Monday	Main OT 4	39Y(s)/Female	IN HOUSE	LUMPECTOMY	ONCO	12:30	13:30	03:30	01:00	60	
149	18-Apr-2022	Monday	Main OT 1	50Y(s)/Male	IN HOUSE	COMMANDO	ONCO	13:45	16:30		02:45	165	
150	18-Apr-2022	Monday	Main OT 2	21Y(s)/Male	IN HOUSE	PILONIDAL SINUS	GENERAL	11:45	13:30	02:45	01:45	105	

151	18-Apr-2022	Monday	Main OT 4	39Y(s)/Female	IN HOUSE	IOPM	GENERAL	16:30	20:20		00:30	30	
152	18-Apr-2022	Monday	Main OT 4	26Y(s)/Female	IN HOUSE	HERNIOPLASTY	GENERAL	14:15	16:30		02:15	135	
153	18-Apr-2022	Monday	Main OT 2	22Y(s)/Male	IN HOUSE	DEBRIDMENT	VASCULAR	15:30	16:45		01:15	75	
154	18-Apr-2022	Monday	Main OT 3	39Y(s)/Male	IN HOUSE	BRAIN TUMOUR	NEURO	09:00	13:30	No delay	04:30	270	RE-SCHEDULED DUE TO UNFIT
155	18-Apr-2022	Monday	Main OT 3	68Y(s)/Male	IN HOUSE	SPINE FIXATION	NEURO	14:15	18:30		02:45	165	
156	18-Apr-2022	Monday	Main OT 5	23Y(s)/Female	IN HOUSE	ASD CLOSURE	CARDIAC	10:15	14:30	01:15	04:15	255	
157	18-Apr-2022	Monday	Main OT 5	62Y(s)/Female	IN HOUSE	CABG	CARDIAC	15:30	19:00		01:30	90	
158	19-Apr-2022	Tuesday	Main OT 1	69Y(s)/Male	IN HOUSE	OIU	UROLOGY	09:30	10:30	00:30	01:00	60	UN-SCHEDULED
159	19-Apr-2022	Tuesday	Main OT 3	46Y(s)/Female	IN HOUSE	ERCP	GASTRO	13:20	14:00		00:40	40	
160	19-Apr-2022	Tuesday	Main OT 3	41Y(s)/Male	IN HOUSE	ERCP	GASTRO	14:10	15:45		01:35	95	Mansarover
161	19-Apr-2022	Tuesday	Main OT 2	60Y(s)/Female	IN HOUSE	LAP.CHOLE	GENERAL	09:20	11:00	00:20	01:40	100	
162	19-Apr-2022	Tuesday	Main OT 2	34Y(s)/Female	IN HOUSE	LAP.CHOLE	GENERAL	11:30	13:00		01:30	90	
163	19-Apr-2022	Tuesday	Main OT 2	26Y(s)/Male	IN HOUSE	FISTULA IN ANO	GENERAL	16:30	17:15		00:30	30	
164	19-Apr-2022	Tuesday	Main OT 3	49Y(s)/Female	IN HOUSE	LUMP EXCISSION	GENERAL	12:30	13:10		00:40	40	
165	19-Apr-2022	Tuesday	Main OT 2	21Y(s)/Female	IN HOUSE	FISTULECTOMY	GENERAL	13:30	14:30		01:00	60	
166	19-Apr-2022	Tuesday	Main OT 3	30Y(s)/Female	IN HOUSE	SISTRUNK	ENT	09:20	12:00	00:20	02:40	160	
167	19-Apr-2022	Tuesday	Main OT 4	42Y(s)/Female	VC	IPOM	GENERAL	12:30	15:30	03:30	03:00	180	
168	19-Apr-2022	Tuesday	Main OT 1	63Y(s)/Female	IN HOUSE	CORE DECOMPRESSION	ORTHO	11:30	12:40		01:10	70	
169	19-Apr-2022	Tuesday	Main OT 1	58Y(s)/Male	IN HOUSE	BONE GRAFTING	ORTHO	14:30	19:30		02:30	150	
170	19-Apr-2022	Tuesday	MAIN OT 5	72Y(s)/Male	IN HOUSE	CABG	CARDIAC	09:30	11:45	00:30	02:15	135	
171	19-Apr-2022	Tuesday	Main OT 5	32Y(s)/Female	IN HOUSE	AVR	CARDIAC	13:00	16:30		03:30	210	
172	19-Apr-2022	Tuesday	Main OT 1	7Y(s)/Female	IN HOUSE	K-WIRE	ORTHO	13:15	14:00		00:45	45	UN-SCHEDULED
173	20-Apr-2022	Wednesday	Main OT 2	28Y(s)/Male	IN HOUSE	URSL	UROLOGY	09:25	10:45	00:25	01:20	80	
174	20-Apr-2022	Wednesday	Main OT 2	72Y(s)/Male	IN HOUSE	TURP	UROLOGY	11:10	12:30		01:20	80	
175	20-Apr-2022	Wednesday	Main OT 1	75Y(s)/Male	IN HOUSE	I&D	UROLOGY	14:00	14:50		00:50	50	
176	20-Apr-2022	Wednesday	Main OT 3	51Y(s)/Female	IN HOUSE	MRM+CHEMO PORT	ONCO	14:00	17:00		03:00	180	
177	20-Apr-2022	Wednesday	Main OT 2	46Y(s)/Male	IN HOUSE	LAP CHOLE	GENERAL	13:10	14:45		01:35	95	
178	20-Apr-2022	Wednesday	Main OT 2	60Y(s)/Male	IN HOUSE	ILEOSTOMY CLOSURE	GENERAL	15:00	18:30		02:00	120	
179	20-Apr-2022	Wednesday	Main OT 3	56Y(s)/Female	IN HOUSE	SPINE FIXATION	NEURO	09:15	13:30	00:15	04:15	255	
180	20-Apr-2022	Wednesday	Main OT 4	43Y(s)/Female	IN HOUSE	MRM	ONCO	11:50	15:00		03:10	190	

181	20-Apr-2022	Wednesday	Main OT 1	73Y(s)/Male	IN HOUSE	DISTAL FEMUR PLATING	ORTHO	10:10	13:30	01:10	03:20	200	
182	20-Apr-2022	Wednesday	Main OT 5	47Y(s)/Female	IN HOUSE	MVR	CARDIAC	15:10	18:30		01:50	110	
183	20-Apr-2022	Wednesday	MAIN OT 5	82Y(s)/Male	IN HOUSE	CABG	CARDIAC	09:30	14:00	00:30	04:30	270	
184	20-Apr-2022	Wednesday	Main OT 4	60Y(s)/Female	IN HOUSE	THROMABECTOMY	VASCULAR	09:20	11:30	00:20	02:10	130	UN-SCHEDULED
185	20-Apr-2022	Wednesday	Main OT 1	39Y(s)/Female	IN HOUSE	ERCP	GASTRO	15:00	15:50		00:50	50	UN-SCHEDULED
186	21-Apr-2022	Thursday	Main OT 3	20Y(s)/Female	IN HOUSE	TYMPANOMASTOIDECTOMY	ENT	09:30	11:00	00:30	01:30	90	
187	21-Apr-2022	Thursday	Main OT 2	54Y(s)/Female	IN HOUSE	LAP CHOLE	GENERAL	10:00	12:00	01:00	02:00	120	
188	21-Apr-2022	Thursday	Main OT 4	3Y(s)/Female	IN HOUSE	PALATOPLASTY	ENT	10:30	12:00	01:30	01:30	90	
189	21-Apr-2022	Thursday	Main OT 2	53Y(s)/Female	IN HOUSE	LAP CHOLE	GENERAL	12:00	13:00		01:00	60	
190	21-Apr-2022	Thursday	Main OT 3	6Y(s)/Female	IN HOUSE	V.P SHUNT REVISION	NEURO	12:30	14:00		01:30	90	UN-SCHEDULED
191	21-Apr-2022	Thursday	Main OT 1	66Y(s)/Male	VC	PCNL	UROLOGY	16:00	17:00		01:00	60	
192	21-Apr-2022	Thursday	Main OT 2	46Y(s)/Male	IN HOUSE	PERIANAL ABCESS	GENERAL	15:30	16:20		00:50	50	UN-SCHEDULED
193	21-Apr-2022	Thursday	Main OT 1	78Y(s)/Male	IN HOUSE	DEBRIDEMENT	VASCULAR	14:00	15:00	05:00	01:00	60	UN-SCHEDULED
194	21-Apr-2022	Thursday	Main OT 3	39Y(s)/Male	IN HOUSE	V.P SHUNT	NEURO	15:00	16:30		01:30	90	UN-SCHEDULED
195	21-Apr-2022	Thursday	Main OT 5	53Y(s)/Male	IN HOUSE	CABG	CARDIAC	09:00	15:00	No delay	06:00	360	
196	22-Apr-2022	Friday	Main OT 1	38Y(s)/Female	IN HOUSE	PFN+ELBOW PLATING	ORTHO	11:45	19:45	02:45	05:15	315	RE-SCHEDULED DUE TO UNFIT
197	22-Apr-2022	Friday	Main OT 3	74Y(s)/Male	IN HOUSE	BRAIN TUMOUR	NEURO	09:15	14:00	00:15	04:45	285	
198	22-Apr-2022	Friday	Main OT 3	62Y(s)/Female	IN HOUSE	ERCP	GASTRO	14:45	16:12		01:27	87	
199	22-Apr-2022	Friday	Main OT 4	50Y(s)/Female	IN HOUSE	LAP.CHOLE	GENERAL	13:00	14:30	04:00	01:30	90	
200	22-Apr-2022	Friday	Main OT 2	34Y(s)/Male	IN HOUSE	LAP.CHOLE	GENERAL	12:00	13:30	03:00	01:30	90	
201	22-Apr-2022	Friday	Main OT 4	49Y(s)/Female	IN HOUSE	MRM	ONCO	14:30	18:30		02:30	150	
202	22-Apr-2022	Friday	Main OT 2	40Y(s)/Male	IN HOUSE	VIU	UROLOGY	14:00	14:45			0	
203	22-Apr-2022	Friday	Main OT 2	45Y(s)/Female	IN HOUSE	VH	GENERAL	15:00	19:25		02:00	120	
204	22-Apr-2022	Friday	Main OT 5	42Y(s)/Female	IN HOUSE	MVR	CARDIAC	10:00	15:00	01:00	05:00	300	
205	23-Apr-2022	Saturday	Main OT 1	48Y(s)/Female	IN HOUSE	PCNL	UROLOGY	10:30	11:45		01:15	75	
206	23-Apr-2022	Saturday	Main OT 2	30Y(s)/Male	IN HOUSE	IMPLANT REMOVAL	ORTHO	15:15	16:30		01:15	75	
207	23-Apr-2022	Saturday	Main OT 4	59Y(s)/Male	IN HOUSE	U/L TKR	ORTHO	16:30	19:30		00:30	30	
208	23-Apr-2022	Saturday	Main OT 3	68Y(s)/Male	VC	U/L TKR	ORTHO	09:20	11:00		01:40	100	
209	23-Apr-2022	Saturday	Main OT 3	71Y(s)/Female	VC	U/L TKR	ORTHO	12:45	14:30		01:45	105	
210	23-Apr-2022	Saturday	Main OT 4	78Y(s)/Male	VC	U/L TKR	ORTHO	10:45	12:20		01:35	95	

211	23-Apr-2022	Saturday	Main OT 3	59Y(s)/Female	VC	B/L TKR	ORTHO	14:30	17:00		02:30	150	
212	23-Apr-2022	Saturday	Main OT 2	39Y(s)/Female	IN HOUSE	ARTHOSCOPY	ORTHO	16:45	18:30		00:15	15	
213	23-Apr-2022	Saturday	Main OT 1	42Y(s)/Female	IN HOUSE	ERCP	GASTRO	13:00	14:15		01:15	75	
214	23-Apr-2022	Saturday	Main OT 1	28Y(s)/Male	VC	PCNL	UROLOGY	14:30	15:30		01:00	60	UN-SCHEDULED
215	25-Apr-2022	Monday	Main OT 1	56Y(s)/Male	IN HOUSE	TURBT	UROLOGY	11:30	12:30		01:00	60	
216	25-Apr-2022	Monday	Main OT 1	53Y(s)/Male	IN HOUSE	CYSTOSCOPY+ OIU	UROLOGY	10:00	11:00		01:00	60	
217	25-Apr-2022	Monday	Main OT 1	32Y(s)/Male	IN HOUSE	URSL	UROLOGY	13:00	14:00		01:00	60	
218	25-Apr-2022	Monday	Main OT 2	62Y(s)/Male	VC	DISTAL PANCREATECTOMY	GENERAL	13:00	18:15		04:00	240	
219	25-Apr-2022	Monday	Main OT 2	10Y(s)/Male	VC	DEBRIDMENT +EXCISSION	GENERAL	14:00	15:00		01:00	60	
220	25-Apr-2022	Monday	Main OT 4	41Y(s)/Female	IN HOUSE	ERCP	GASTRO	12:00	13:00		01:00	60	
221	25-Apr-2022	Monday	Main OT 4	42Y(s)/Male	IN HOUSE	TURBT	UROLOGY	14:15	15:30		01:15	75	UN-SCHEDULED
222	25-Apr-2022	Monday	Main OT 2	49Y(s)/Female	IN HOUSE	URSL	UROLOGY	16:20	17:00		00:40	40	UN-SCHEDULED
223	25-Apr-2022	Monday	Main OT 1	30Y(s)/Male	IN HOUSE	EXPLORATION	GENERAL	10:30	12:30		02:00	120	EMERGENCY
224	26-Apr-2022	Tuesday	Main OT 1	45Y(s)/Female	IN HOUSE	COMMANDO WITH FREE FLAP	ONCO	09:20	16:30	00:20	07:10	430	
225	26-Apr-2022	Tuesday	Main OT 3	67Y(s)/Male	IN HOUSE	SSG	PLASTIC	11:30	12:45	02:30	01:15	75	
226	26-Apr-2022	Tuesday	Main OT 4	26Y(s)/Female	IN HOUSE	OLECRANON PLATING	ORTHO	12:00	16:00	03:00	04:00	240	
227	26-Apr-2022	Tuesday	Main OT 5	40Y(s)/Male	IN HOUSE	CABG	CARDIAC	10:00	14:30	01:00	04:30	270	
228	26-Apr-2022	Tuesday	Main OT 5	38Y(s)/Male	IN HOUSE	MVR	CARDIAC	15:00	19:00		02:00	120	
229	26-Apr-2022	Tuesday	Main OT 2	67Y(s)/Male	IN HOUSE	W/D LOCAL /FLAP	ONCO	15:45	17:15		01:15	75	
230	26-Apr-2022	Tuesday	Main OT 2	65Y(s)/Female	VC	LAP.CHOLE	GENERAL	12:15	14:00	03:15	01:45	105	
231	26-Apr-2022	Tuesday	Main OT 3	71Y(s)/Male	IN HOUSE	ERCP	GASTRO	14:15	15:00		00:45	45	
232	27-Apr-2022	Wednesday	Main OT 3	46Y(s)/Female	IN HOUSE	TYMPANOMASTOIDECTOMY	ENT	09:30	12:30	00:30	03:00	180	
233	27-Apr-2022	Wednesday	Main OT 4	51Y(s)/Female	IN HOUSE	BAKER'S CYST EXCISION	ORTHO	13:45	15:00		01:15	75	
234	27-Apr-2022	Wednesday	Main OT 4	46Y(s)/Male	IN HOUSE	ROTATOR CUFF	ORTHO	15:20	21:00		01:40	100	
235	27-Apr-2022	Wednesday	Main OT 1	73Y(s)/Male	IN HOUSE	TURBT	UROLOGY	12:00	17:00		05:00	300	ANES.ADV.(Unsechduled)
236	27-Apr-2022	Wednesday	Main OT 1	56Y(s)/Male	IN HOUSE	TURBT	UROLOGY	10:00	11:30	01:00	01:30	90	
237	27-Apr-2022	Wednesday	Main OT 2	42Y(s)/Female	IN HOUSE	LAP CHOLE	GENERAL	10:30	13:30	01:30	03:00	180	
238	27-Apr-2022	Wednesday	Main OT 2	69Y(s)/Male	IN HOUSE	LAP.RECTOPEXY	GENERAL	14:00	18:30		03:00	180	
239	27-Apr-2022	Wednesday	Main OT 3	18Y(s)/Female	IN HOUSE	BRAIN TUMOR POSTERIOR	NEURO	13:15	15:30		02:15	135	UN-SCHEDULED
240	27-Apr-2022	Wednesday	Main OT 4	4M(s)/Male	IN HOUSE	ANT REPAIR	PLASTIC	11:00	13:00	02:00	02:00	120	

241	27-Apr-2022	Wednesday	Main OT 5	62Y(s)/Female	IN HOUSE	CABG+MVR	CARDIAC	09:30	16:30	00:30	07:00	420	
242	28-Apr-2022	Thursday	Main OT 4	15Y(s)/Male	IN HOUSE	LIP NOSE REPAIR	PLASTIC	11:00	13:00	02:00	02:00	120	
243	28-Apr-2022	Thursday	Main OT 2	17Y(s)/Male	IN HOUSE	TYMPANOMASTOIDECTOMY	ENT	09:00	12:30	No delay	03:30	210	
244	28-Apr-2022	Thursday	Main OT 1	75Y(s)/Female	IN HOUSE	GB PERFORATION	GENERAL	09:45	13:15	00:45	03:30	210	re-scheduled due to unfit (sodium 124
245	28-Apr-2022	Thursday	Main OT 2	58Y(s)/Male	IN HOUSE	SEPTOPLASTY	ENT	16:00	17:30		01:00	60	
246	28-Apr-2022	Thursday	Main OT 5	57Y(s)/Male	IN HOUSE	MVR	CARDIAC	09:30	12:00	00:30	02:30	150	
247	28-Apr-2022	Thursday	Main OT 5	52Y(s)/Male	IN HOUSE	CABG	CARDIAC	13:15	17:00		03:45	225	
248	28-Apr-2022	Thursday	Main OT 2	31Y(s)/Male	IN HOUSE	URSL	UROLOGY	13:30	14:45		01:15	75	UN-SCHEDULED
249	29-Apr-2022	Friday	Main OT 3	49Y(s)/Male	IN HOUSE	BRAIN TUMOR MENINGIO	NEURO	09:00	12:30	No delay	03:30	210	RE-SCHEDULED DUE TO APPROVAL
250	29-Apr-2022	Friday	Main OT 1	54Y(s)/Female	IN HOUSE	HERNIA	GENERAL	09:10	14:00	00:10	04:50	290	
251	29-Apr-2022	Friday	Main OT 2	60Y(s)/Male	IN HOUSE	KIDNEY DONER	UROLOGY	09:20	14:30	00:20	05:10	310	
252	29-Apr-2022	Friday	Main OT 4	31Y(s)/Male	IN HOUSE	KIDNEY RECIPIENT	UROLOGY	11:00	16:00	02:00	05:00	300	
253	29-Apr-2022	Friday	Main OT 3	6M(s)/Female	IN HOUSE	LIP REPAIR	PLASTIC	12:15	14:00		01:45	105	
254	29-Apr-2022	Friday	Main OT 3	61Y(s)/Male	IN HOUSE	FEM.POP BYPASS	VASCULAR	14:30	17:00		02:30	150	
255	29-Apr-2022	Friday	Main OT 2	67Y(s)/Male	IN HOUSE	GB PERFORATION	GENERAL	14:45	17:00		02:15	135	
256	29-Apr-2022	Friday	MAIN OT 5	72Y(s)/Male	IN HOUSE	AVR	CARDIAC	09:20	12:30	00:20	03:10	190	
257	29-Apr-2022	Friday	Main OT 5	14Y(s)/Male	IN HOUSE	VASCULAR RECONSTRUCTI	CARDIAC	14:30	18:15		02:30	150	
258	30-Apr-2022	Saturday	Main OT 4	69Y(s)/Female	IN HOUSE	AXILLARY BYPASS	VASCULAR	11:00	13:10		02:10	130	RE-SCHEDULED TO OT SLOT
259	30-Apr-2022	Saturday	Main OT 1		IN HOUSE	B/L VARICOSE VEIN	VASCULAR	13:45	15:00		01:15	75	
260	30-Apr-2022	Saturday	Main OT 2	17Y(s)/Male	IN HOUSE	EXP.LAPAROTOMY	GENERAL	14:30	18:30		02:30	150	
261	30-Apr-2022	Saturday	MaIN OT 3	34Y(s)/Female	VC	LAP.CHOLE	GENERAL	16:00	18:00		01:00	60	
262	30-Apr-2022	Saturday	Main OT 1	23Y(s)/Male	IN HOUSE	URSL	UROLOGY	14:00	15:00		01:00	60	
263	30-Apr-2022	Saturday	Main OT 1	37Y(s)/Female	IN HOUSE	EXP.LAPAROTOMY	ONCO	15:00	15:45		00:45	45	RE-SCHEDULED DUE TO APP
264	30-Apr-2022	Saturday	Main OT 5	40Y(s)/Female	IN HOUSE	MVR	CARDIAC	11:00	15:00	02:00	04:00	240	