

Study to Improve the Utilization in Operation Theater in a Specialty Hospital

By

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*Dissertation submitted for the partial fulfillment of the
MBA Hospital and Health Management*

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TO WHOMSOEVER MAY CONCERN

This is to certify that **Kajol Shah** student of MBA Hospital and Health Management from The IIHMR University, Jaipur has undergone dissertation training at **Indowestern Brain and Spine Hospital, Jaipur** from February 01st 2016 to April 30th 2016.

The Candidate has successfully carried out the study designated to her during dissertation training and her approach to the study has been sincere, scientific and analytical. This training is in fulfillment of the course requirements.

I wish her all success in all future endeavors.



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In recognition of having successfully completed her

Internship in the department of

QUALITY

And has successfully completed her Project on

**“A study to improve the utilization in Operation Theater in a
Specialty Hospital”**

Date: MAY 14, 2016

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She comes across as a committed, sincere & diligent person who has a

Strong drive and zeal for learning

We wish her all the best for future endeavours

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This is to certify that Ms. Kajol Shah has successfully completed 3 months' training in Hospital Management at IBS Hospital, under the supervision of Hospital Director Dr Bhawna Goyal. During her tenure she was exposed to all areas of management. She actively participated in the hospital preparations for QCI inspection on 07th April 2016 which provided her an extremely coveted opportunity to be in the frontline of managerial tasks, she worked hard and proved a valuable asset for this inspection which was a pre-run for NABH.

She also undertook an audit project: To evaluate the Elective Operation Theatre Utilization in Indowestern Brain and Spine Hospital.

Duration of Training – February 01, 2016 to April 30, 2016.

She discharged all her duties to my satisfaction. She has a friendly disposition and is an excellent team player.

We wish her all the best for her future endeavors.

For Indowestern Brain and Spine Hospital

Director

Dr Bhawna Goyal
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THE IIHMR UNIVERSITY, JAIPUR

CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled "**A Study to improve the utilization in operation theatre in a Speciality Hospital**" and submitted by **Kajol Shah** Enrollment No. **IIHMR-U/MBA-HM/2014-16/19-1558** under the supervision of **S.K. Puri (Brigadier)** for award of Masters in Hospital Management of the University carried out during the period from **2014 to 2016** embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other Institute or other similar institution of higher learning.

Kajol Shah

Signature

ACKNOWLEDGEMENT

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Kajol Shah

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ABBREVIATIONS

OT	Operation Theatre
HMIS	Hospital Management Information system
UHID	Unique Hospital Identification number
PAC	Pre- Anesthetic Check-up
TPA	Third party Administrator

1. DISSERTATION REPORT

A STUDY TO IMPROVE THE UTILIZATION OF OPERATION THEATRE IN A SPECIALITY HOSPITAL

1.0 EXECUTIVE SUMMARY:

The importance of dissertation was such that it was the second interface with any hospital after the summer training and it was altogether a different experience because this time there was an idea about the hospital atmosphere and its working.

In Quality Assurance Meeting, the problem of OT scheduling with the problem of postponement/delays and problem of same day scheduling. I took the responsibility with two motives of improvising the efficiency /utilization of Operation Theatre and taking it as dissertation topic.

As a hospital management student all the required information as per knowledge was collected to start the work. The study started with the literature review & understanding of its process. Data collection was started to see the trend of problematic areas. Along with this, probable reasons for problematic areas were being tracked on daily basis.

Moreover, training in a reputed and private hospital having high standard quality of Medicare is not an easy task to get through in which we can expose and gain knowledge and skill to be a hospital administrator. The study on this subject gave a great exposure and helped to obtain a vast knowledge of ideas and information about the hospital administrative system.

1.1 INTRODUCTION

An operation theatre is the room in the hospital whose function is the carrying of the major surgical procedures, operations. Such operation theatres are mainly used for surgical procedures and not for other medical interventions. In other words the operation theatre suit of the hospital is a complex workshop and the most important facility of the surgical department.

Operation theatre represents significant amount of expenditure in the hospital budget considering the cost incurred in the operation theatre, the hospital administrator should more concern about the efficient utilization of operation theatre.

The managerial aspect of providing health services to patients in hospitals is becoming increasingly important. Hospitals want to reduce costs and improve their financial assets, on the one hand, while they want to maximize the level of patient satisfaction, on the other hand. One unit that is of particular interest is the operating theater. Since this facility is the hospital's largest cost and revenue center, it has a major impact on the performance of the hospital as a whole.

Enhancing the efficiency of operating theatre has been always a challenging process especially in a quick changing healthcare sector with increased patient care complexity.

“Management of operating theatres requires the coordination of human and material resources in such a way that surgery can be performed efficiently, cost effectively, and safely (Plasters 2003) within the rules of clinical governance of standards.”

Managing the operating theater, however, is hard due to the conflicting priorities and the preferences of its stakeholders. Moreover, health managers have to anticipate the increasing demand for surgical services caused by the aging population. These factors clearly stress the need for efficiency and necessitate the development of adequate planning and scheduling procedures.

1.2 LITERATURE REVIEW

Operating Theatre scheduling is a major contributing factor to enhance the efficiency of operating theatres. Accurate and real time scheduling assist in predicting staffing needs, ensuring availability of required equipment and supplies and thus contribute to a smooth running operating theatre. ^[1]

Magerlein and Martin review the literature on surgical demand scheduling and distinguish between advance scheduling and allocation scheduling. Advance scheduling is the process of fixing a surgery date for a patient, whereas allocation scheduling determines the operating room and the starting time of the procedure on the specific day of surgery. ^[2]

An accurate schedule must list realistically the starting and ending time of each surgery. In addition, conflicts of schedules shall be resolved by the operating theatre manager. Schedules need to be rearranged according to agreed-on principles among all surgeons, on condition that guidelines are developed to define elective versus non-elective cases. ^[3]

Accordingly literature does not question or challenge the level of urgency however recommend classifying surgeries as elective, where patient condition will not be affected as a result of delaying the surgery for a minimum of forty-eight hours, and non elective . Under the concept of creating a realistic operating schedule, reflected on the importance of having a real time based schedule which is essential to predict human and resource needs.

The real time schedule requires accurately specifying the starting and ending time of surgeries with as much as possible accurate surgery duration. This real time requires timely updating as the day goes on. In addition, literature reflected the importance of defining the start time of each surgery and the impact of providing a precise duration to avoid confusion, allow proper allocation and distribution of surgeries and standardize data collection. ^[4] Moreover, the importance of developing policies to streamline scheduling procedures was highly stressed.

The procedure requires setting certain guidelines of what cases are to be scheduled as first day case, what is an elective case versus non elective.^[5]

Listed four important steps to assist in scheduling urgent cases and the related process to follow. Of these steps he included patient medical condition, evaluating patient waiting time, impact on OT efficiency and patient safety. Within 13 these definitions it is essential to secure the surgeons agreement and commitment to abide by these guidelines and accordingly to abide by the scheduling process. This will reflect caring for all the surgeons similarly.^[6] This is important from the surgeons' perspective, their surgery is the ultimate goal and the most important to perform.

An approach to decrease the first case delay along with an accurate recording and booking time with no "to-follow" schedule should be put in place. It was categorically rejected, as per literature, to have a "To Follow" designation of surgery. Managing all these factors besides decreasing staff scheduling variation and ensuring adequate housekeeping services contributed in many studies to decrease the prolonged operating theatre turn-over time.^[7]

The turn over time describes the time delay between the first and the second surgery and measured by calculating the time the first case leaves an operating theatre on that day schedule to the time the second patient enters that same theatre and the impact of this delay on the suspension of all consecutive surgeries which will result in stretching the schedule time and extending the operating theatre working hour scored the value of turn over time in his study so that it reflects poor performance if it is more than forty minutes and for good performance it shall be less than twenty five minutes.^[8]

Blake and Carter elaborate on this taxonomy in their literature review and add the domain of external resource scheduling, which they define as the process of identifying and reserving all resources external to the surgical suite necessary to ensure appropriate care for a patient before and after an instance of surgery. They furthermore divide each domain in a strategic, administrative and operational level, although these boundaries may be vague and interrelated.^[9]

Przasnyski structures the literature on operating room scheduling based on general areas of concern, such as cost containment or scheduling of specific resources. ^[10]

1.3 JUSTIFICATION OF STUDY

Managing the operation theater in a specialty Indowestern Brain and Spine Hospital is a difficult task due to conflicting priorities. Staffs that were looking for the scheduling of cases in Operation Theatre were facing many problems. Normal OT timings are from 10:00 A.M to 6:00 PM. However number of on-time starts of cases is very less and that leads to wastage of resources and mismanagement of OT and hence less utilization of OT. Surgeons were scheduling their patients without confirming to the readiness of patient, leading to increase number of cancellation of cases. They even do not provide sufficient information regarding cases.

Staff raised many criticisms reflecting lack of communication among the different groups. All this reflected a non-coherent and poor workflow within the theatres. It was essential to address this area seriously. Trying to understand the operating theatre status and the contributing factors to this ailment I decided to start with Process mapping.

Service Description

The kinds of procedures in our hospital are emergency procedures, referred procedures or one day prior scheduled. The 3 procedures can be categorized into different service types: Neurology, Total knee replacement, total hip replacement, Spine surgery, surgery relating to bones was conducted

The focus of thesis is on problem arising in OT scheduling as Cancellation, delays in Surgery cases and mainly same day scheduling. Late Start of OT is another main area of concern, which all together decreases the efficiency of OT and hence OT utilization

1.4 AIM

“To improve the Operation Theatre utilization in Indowestern Brain and Spine Hospital, Jaipur.”

1.5 OBJECTIVES

The study had the following objectives:

1. To find out OT utilization rate at Indowestern Brain and Spine Hospital, Jaipur.
2. To identify the bottle necks in the system, for proper and efficient utilization of Operation Theatre
3. To suggest remedial measures for improving the Operation Theatre Utilization.

1.6 METHODOLOGY AND DATA COLLECTION

The study was conducted prospectively from February 2016 to April 2016 in the operation theatre department of Indowestern Brain and Spine Hospital, Jaipur. This hospital is a brain and spine speciality hospital with 36 operational beds. The hospital runs 1 OT. During the study period all inpatient including daycases were taken. Surgery cases were categorized into major and minor cases; major cases were those requiring the general anaesthesia while the minor cases were those requiring the local anaesthesia.

The descriptive study is done over in the operation theatres. Operation theatre utilization is studied with respect to working hours of the operation theatres, turnaround time and time taken for the procedures. Time taken for the surgery was studied by final case paper of individual patient which is maintained in the OT as final OT list. An operation theatre lists are prepared on daily basis which are named as OT list. All the patients who were listed for the elective surgery on previous day in the OT list that were fit to undergo the surgery, who had the financial clearance and who had signed the consent for the risk coverage when all these criteria were fulfilled and the surgery was performed. So for identify the postponed cases data from the list were studied and cross checked by the records maintained in the OT.

Primary data was collected to estimate operation theatre utilization from records and registers available and maintained in the OT on daily basis. For estimation of OT utilization rate total available time was taken as total working hours of the OT. To estimate time taken for the surgery and cleaning I have collected data from the OT on daily basis.

OT

To identify the bottlenecks in the system the OT list is studied on daily basis to estimate the number of postponed cases. OT list was prepared one day prior to the surgery in which all the cases were entered whose financial clearance, consent and pre anesthetic checkup were done. OT list also included the surgery time as one of the heads, thus the necessary information for the purpose of calculating the theatre utilization.

1.6.1 PROCESS MAPPING

Table 1: Total manpower available in OT

The manpower in OT department is sufficient as per standard to provide efficient utilization of operation theatre. However one more OT assistant can be hired.

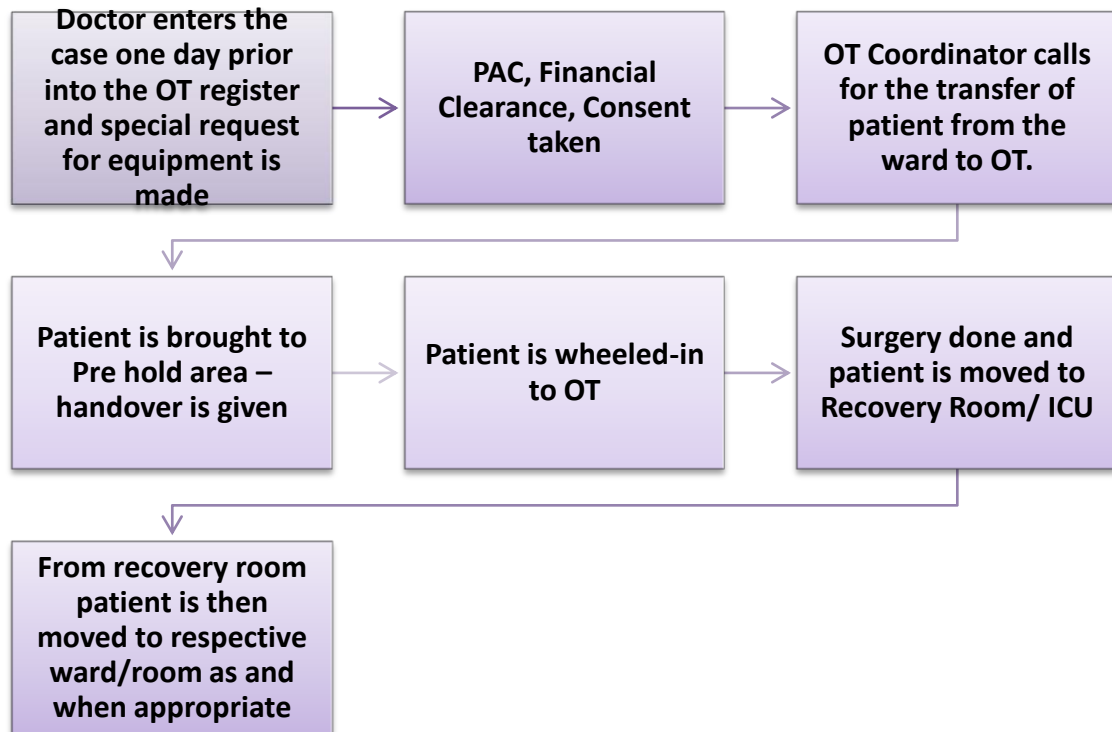
The operating theatre (OT) complex is composed for high standard clinical care. The theatre receives multiple varieties of surgical cases extending from minor to major ones.

The standard operating hours of OT are Monday to Saturday from 10:00am to 6:00pm. Moreover emergency cases are also conducted if need arises at any point of day.

1.6.2 PROCESS FLOW:

Operation theatre is booked one day prior to the surgery by the respected surgeon into the OT list after the proper counseling of the patient by the doctor telling him the risks associated with not having the surgery done. Once the surgery is entered into the OT list the patient is asked to get admitted to the hospital one day prior to the surgery, if the patient is ECHS/CGHS (ex-servicemen contributory health scheme/central government health scheme) then he is asked to get the surgery referred and if the patient is the cash patient he is asked to deposit the surgery amount. After all this procedure is done the OT- coordinator asks the staff in the respective wards to send the patient to pre anesthetic room wherein the PAC (Pre anesthetic checkup) of the patient is done, if the patient is fit for the surgery his consent is taken and if the patient is not fit then the patient is not counted for the surgery. After all this is done, the patient is shifted to the surgery room for the surgery. After the surgery the patient is shifted to the ICU, from ICU the patient is shifted to ward form where he is discharged.

Figure 1: Process Flow of a surgery performed in the OT of hospital



1.6.3 OT BOOKING

After taking decision for surgery of a patient, Surgeon /doctor inform the OT co-coordinator for OT booking. OT booking register is to be filled by OT co-coordinator at the time of booking.

OT booking register contains the following head:

1. Booking date and time
2. Name of patient
3. Age/sex
4. CR. No.
5. Ward
6. Diagnosis
7. Procedure/Surgery
8. Name of the Surgeon

9. Anesthetist
10. Time of procedure
11. Staff name

1.6.4 CLEARANCES, INVESTIGATION AND CONSENT:

A typical surgical patient undergoes several preoperative activities that varies from physical examination, investigations, and consent taking to different clearances as PAC (Pre Anesthetic check-up), financial clearances etc. Once all these activities are completed the surgical procedure is performed.

At each activity, different stake holders are involved who contribute in the efficient scheduling of cases in Operation Theatre.

1.6.4.1 Clearances:

Mainly two clearances are needed before a patient undergoes a surgery in OT

- a) PAC (Pre-Anesthetic check-up) clearance
- b) Financial Clearance

a) PAC (Pre-Anesthetic check-up):

Prior to administration of any type of anesthesia, the patient has to be checked up by a doctor specialist-anesthesiologist who gets information on the physical and mental condition of the patient. Apart from the detailed examination, the checkup also includes getting information on all prior examination made and respective results thereof.

This is rather helpful when making the decision whether the administration of certain type of anesthesia will be contraindicated or possible after appropriate preparation made in order to optimize the patient's condition for the purpose of carrying out the surgery and administering the anesthesia. PAC is done on prior day of surgery and in case of emergency; PAC is done in the O.T.

b) Financial clearance:

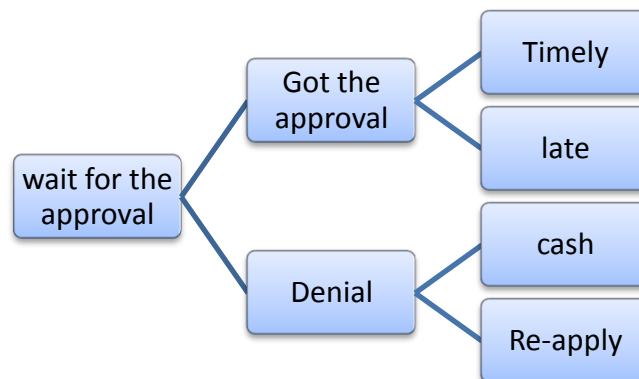
There are three categories, under which financial clearances are done.

- i. TPA patients,
- ii. CGHS/ESI patients, and
- iii. Cash patients

TPA patients:

TPA patients have to wait for their approval for getting the financial clearance. TPA cases can be preplanned or emergency cases. Ideally, surgery should be scheduled and patient should be admitted after the approval has come. In normal cases, the usual time for the approval is 15min to 6 hrs. Delayed approval can take 3 days.

Figure 2: Process flow for the TPA patients:



CGHS/ESI patients:

CGHS /ESI patients also have to bring the approval.

Cash patients:

Cash patients have to deposit the surgery amount before the admission for surgery.

1.6.4.2 Investigations:

Patients have to go undergo certain investigations before undergoing any surgery. Surgeons have to plan the surgery based upon the results of investigation report.

1.6.4.3 Consent

Prior to the surgery, consents have to be taken by the patient after explaining the need of the procedure and the risk and the complication associated with the procedure. It has to be duly signed and dated by the patient/relative and surgeon. It should be taken a day before the surgery.

1.7 DATA ANALYSIS:

1.7.1 Data analysis for estimation of OT utilization rate:

OT utilization is the quality parameter of the operation theatre which indicates that how much time the OT is being utilized for actual procedure (time taken for the procedure and the time taken for cleaning of the OT) against the total available time. For measuring the OT utilization we use one indicator that is OT utilization rate that depicts the hours for which actual OT is being utilized. It is defined as total time taken for the surgery and cleaning of OT in hours against available time in hours.

OT utilization can be calculated by the following formula:

$$\text{OT utilization rate} = \frac{\text{Total time for surgery (time out–time in) in hrs+ Cleaning time in hrs}}{\text{Total time available in hrs}} \times 100$$

For the month of February,

Total available hours= 152

Total time taken for surgery and cleaning of OT= 129

$$\text{OT utilization rate for Feb month} = \frac{129}{152} \times 100 = 84.86\%$$

For the month of March,

Total available hours= 216

Total time taken for surgery and cleaning of OT= 210

$$\text{OT utilization rate for March month} = \frac{210}{216} \times 100 = 97.22\%$$

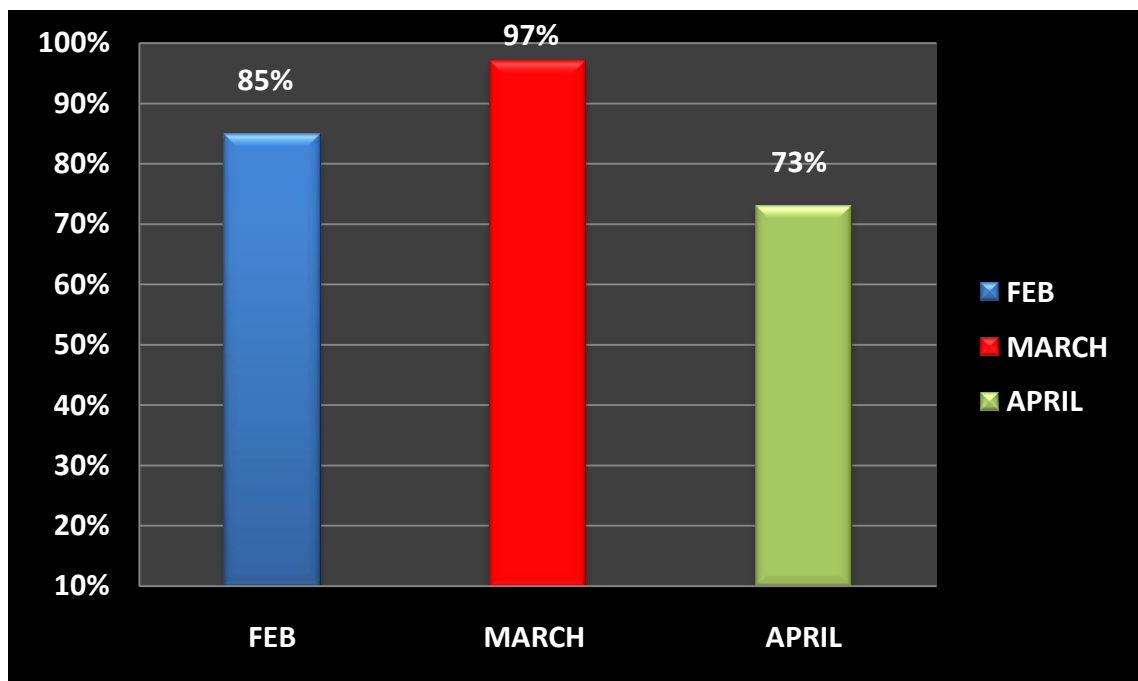
For the month of April,

Total available hours= 208

Total time taken for surgery and cleaning of OT= 153

$$\text{OT utilization rate for March month} = \frac{153}{208} \times 100 = 73.55\%$$

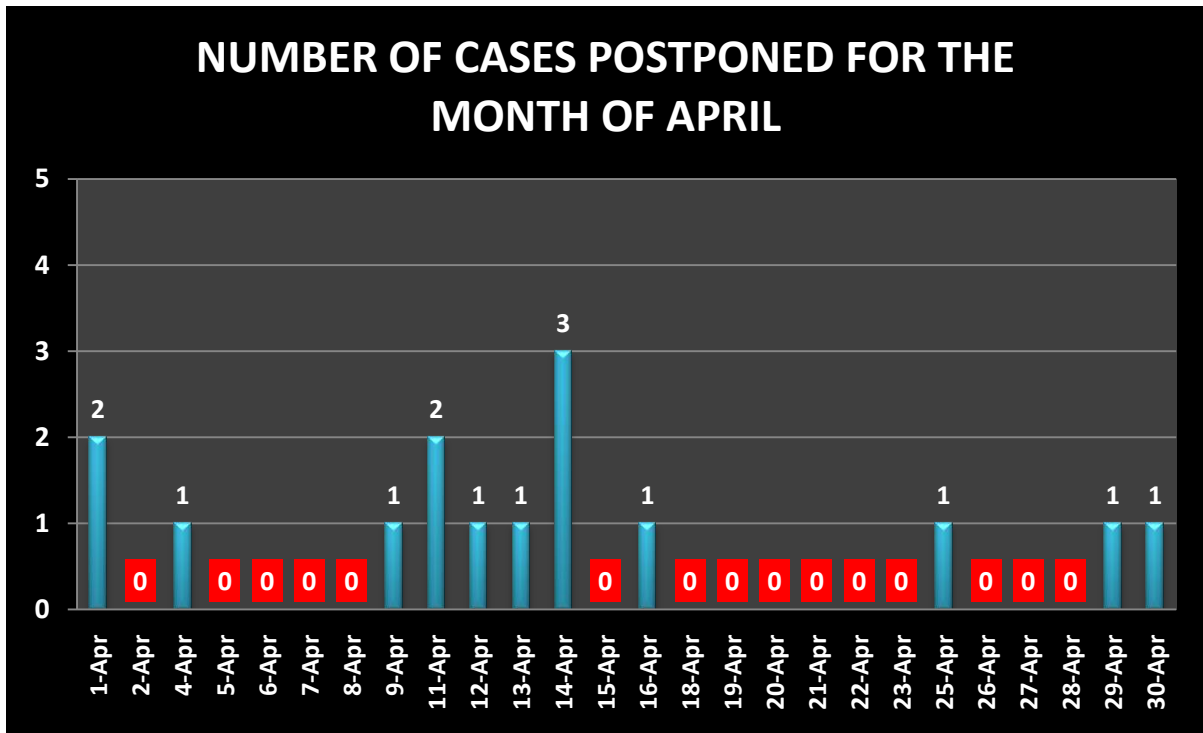
Figure 3 Utilization of OT for the Month of February, March and April



1.7.2 Number of cases Postponed for the Month of April

Figure 4 Analysis of total number of cases postponed for the month of April

Figure depicts that out of total 74 cases around 20% that is 15 cases were cancelled who were scheduled for the procedure in the month of April.



1.7.3 Data to show the time of first case (start of OT day) of different Month :

Data of all the cases was collected for the month of February to April, the start timings of the OT's were plotted on graphs to identify whether the delay in timings of OT was one of the factor contributing to the under utilization of the operation theatre.

Figure 5: Delay in start time of OT for the month of February

Figure depicts for the month of February that shows time of start on each working day of hospital. Time of start for each day varies drastically from 10AM to 12AM which is quite an unusual. In majority of the cases it was found that the OT starts after 10AM. Delay in the OT cases is the major factor that contributes to the under utilization of the operation theatre. As staff timings are from 10 AM to 6PM, the OT should be used to fullest during these hours as it also caters for the under utilization of the manpower.

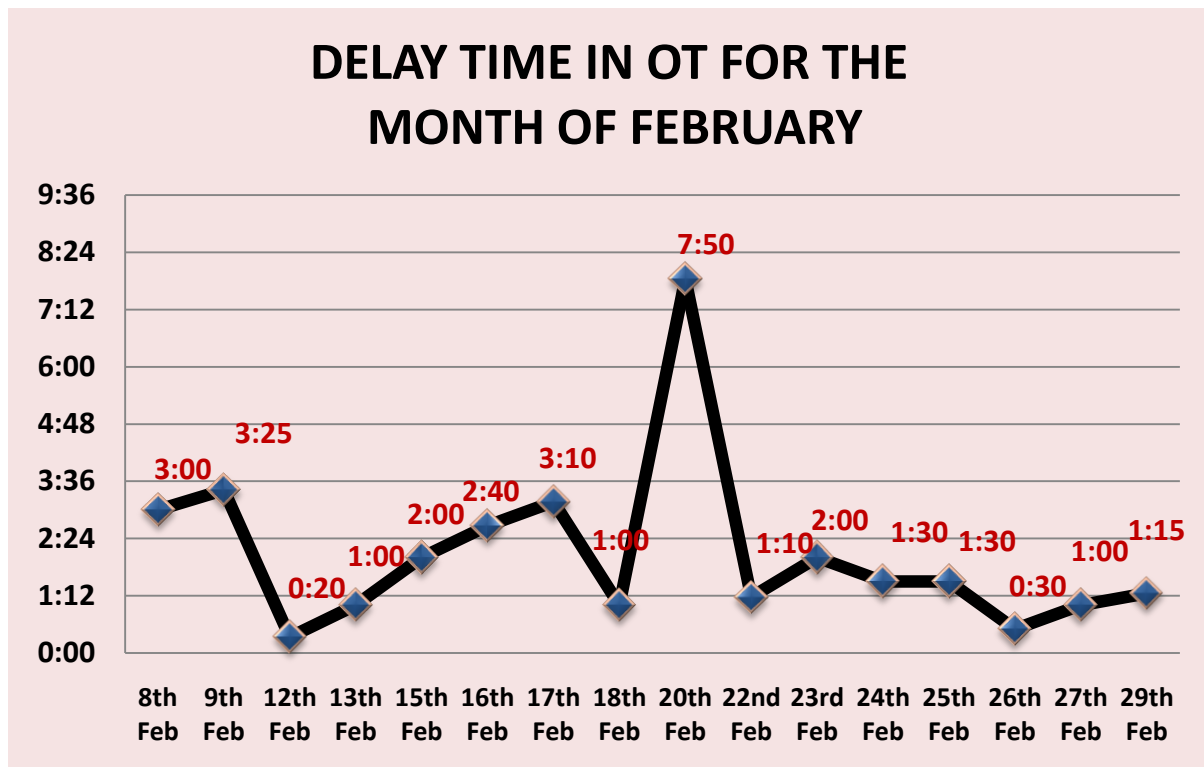


Figure 6: Delay in start time of OT for the month of March

Figure depicts for the month of March that shows time of start on each working day of hospital. Time of start for each day varies drastically from 10AM to 12AM which is quite an unusual. In majority of the cases it was found that the OT starts after 10AM. Delay in the OT cases is the major factor that contributes to the under utilization of the operation theatre.

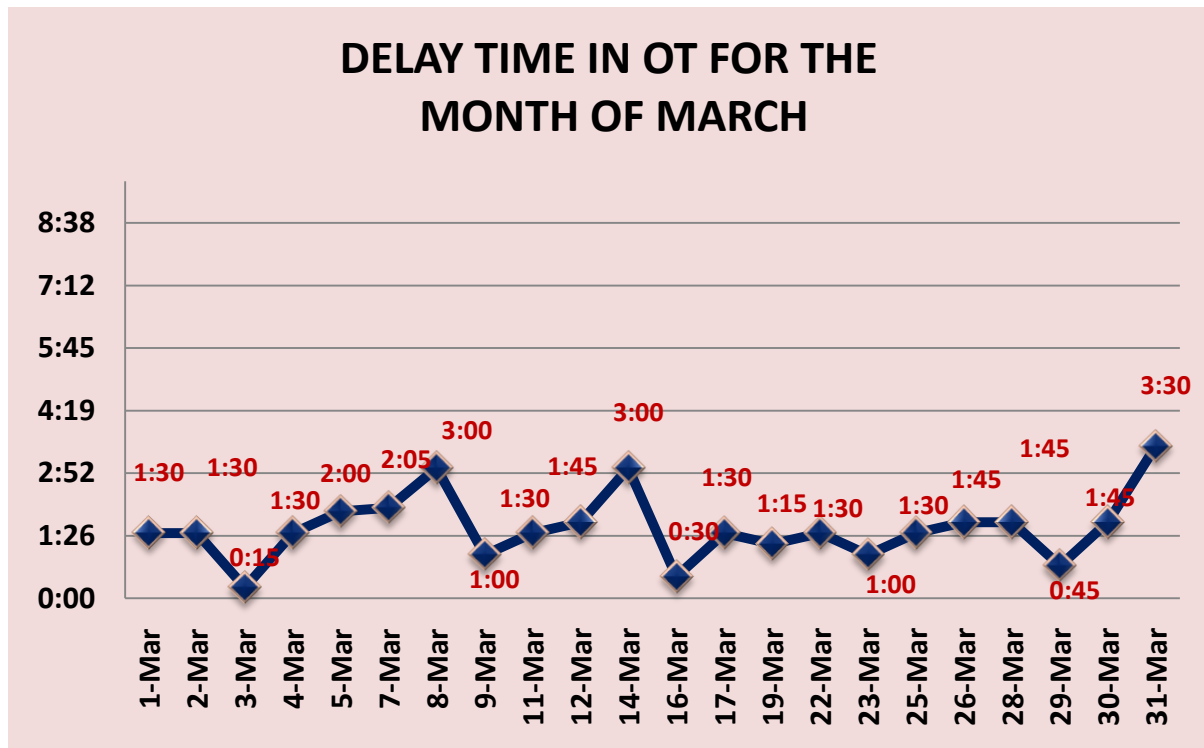
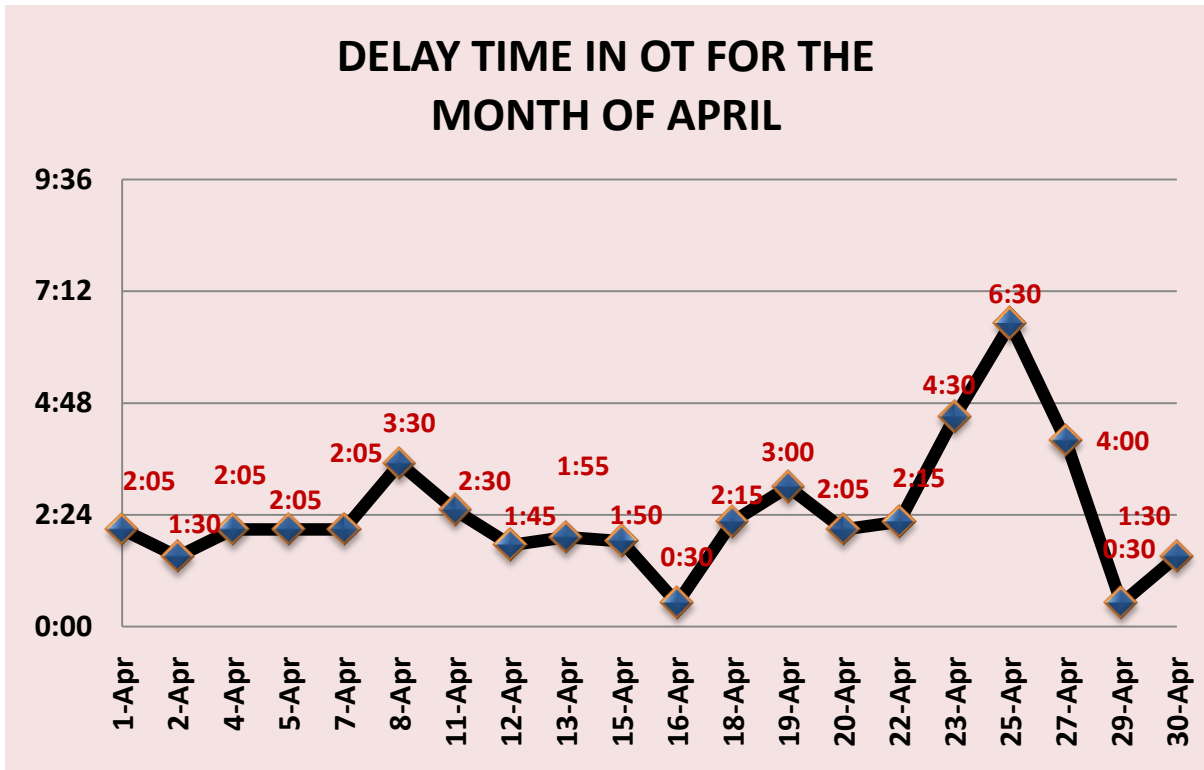


Figure 4: Delay in start time of OT for the Month of April

Figure shows data for the month of April and again time of start on each day varies from 10 AM to 6 PM. In OT, None of the cases started on 10AM, this shows that utilization can't be achieved to the fullest, thus the timings of the OT either have to be changed or the scheduling of the cases has to be corrected.



1.7.6 Gaps identified and analyzed:

1. *In OT booking:*

When a patient comes for the surgery, the doctor enters his/her name into the OT booking register. Booking register is not filled properly by some of the doctors at the time of OT booking. Surgeon book the OT for a specific date, with the name of surgery only. In most of the Bookings, rests of the details of booking register are not filled. An approximate time required for the surgery should be mentioned in the register that gives an idea to the OT coordinator for the booking of other cases.

Thus for all cases the tentative duration of Surgery is not filled and not defined, hence next case start time could not be defined for booking. No option for slot booking is available. In some of the cases, no information is given beforehand if there is any special requirement for any case/surgery. No column for 'Infected' or 'Non Infected' cases in booking register.

2. *In Clearances, Investigation and Consent:*

Delay in clearances or investigation report lead to either delay or postponement of cases. This delay will alter the OT scheduled and which can affect the OT utilization rate.

PAC: After the decision of Surgery, Surgeon does not counsel the patient properly so that patient can come on time a day before for PAC and thus delays or postponement occurs. Availability of Anesthetist and nurses on time also contribute in the process.

Financial Clearance Delay in financial clearance disturbs the whole OT Scheduling process. Various stakeholders are involved in financial clearance as patient, Relatives, Surgeon, Nurses, TPA and Insurance Companies. Delay at one end delays the whole process.

At third party administration end:

In the hospital two types of patients walk in, first type are the private patients or the cash patients who pay the cash directly at billing desk others are the TPA (Third party administration) which are the insurance companies that are empanelled with the hospital,

patients have to bring their referral approved by the insurance companies one day prior to the surgery. Problems arise in the following steps which are as follows:

3. Admission of cases without approval:

In some of the cases surgeons book the OT for a patient even knowing that there are chances of late approval with the fact that patient can opt out of Surgery. Patient gets admitted without the approval and thus there is delay or postponement of cases, because of not getting the approval on time.

4. Lack of communication from doctor's end

There are delays in TPA approval due to change in the care plan. After deciding the care plan, request is sent to TPA, which they forward to Insurance Company for approval. Doctors do not inform on time if there is change in care plan. Therefore the whole process is repeated again, which causes inconvenience to all the stakeholders and thus delay in getting the approval. Hence, there is delay / postponement of cases leading to rescheduling of cases.

5. Delay in receiving reports:

There is delay in getting TPA approval because TPA doesn't get reports on time either from the nursing station, lab or from the patients.

6. Scheduled cases are delayed/postponed if after reviewing the investigation report, surgeon finds the patient unfit for surgery.

7. Delay in receiving blood :

There is delay in receiving blood group from different different blood bank as Because of non availability of blood bank in the hospital premises.

8. Service Limitation:

- The OT is functional for 10am to 6pm. due to the emergency cases any elective case in between the OT hours has to be postponed or rescheduled. Thus there is lack of surgeons, due to which elective cases are delayed.
- As there are only 36 operational beds in the hospital thus due to which OT cases are delayed as the bed is not vacant.

1.8 CONCLUSION:

As healthcare workers we have to believe that our main responsibility is to maintain our accountability and to deal with issues with a professional point of view. This project enriched my portfolio with a success story based on a determination, understanding and implementing change where change is needed.

Describing my project it is very important to conclude its significance for me as a manager in a new role, understanding all contributing factors, exchanging ideas with people, learning new strategies, failing at times. Tackling such an important area as the operating theatre was an important decision and a challenging job since it is well known that operating theatres are the money generating areas in any private healthcare institution. Recommendations given into this area will not only improve the OT efficiency, but quality of care in general will be improved by raising the bar for better practice and enhanced communications.

Bottlenecks can be summarized as follows:

1. Cancellation of cases
2. Same day scheduling
3. Postponement of cases
4. Delay / pre postponement of Scheduled cases.
5. Late start of OT for the day

1.8.1 Cancellation

In majority of cases, the reason for cancellation was mainly due to high tariffs. Other reasons were cardiac clearance, patient not fit for surgery, Change of care plan as in one of the cases after MRI and some cases were LAMA.

1.8.2 Same day scheduling:

Some of the Surgeons have the habit of not booking the OT before hand and thus scheduled their surgeries on the same day or according to their own convenience.

1.8.3 Postponement of cases:

Following are the reasons that were found for postponement of cases:

- TPA approval pending
- ESI approval pending
- Investigation reports pending
- Patient late admission
- Special Implant was not available.
- Due to emergency patients.
- Non availability of blood group.
- Non availability of ICU bed.

1.8.4 Delays:

Following reasons were found for the delay of cases.

- Patient late admission/delay in arrival of patient
- TPA clearance
- Same day scheduling
- Surgeon coming late for OT.
- Non availability of blood group.
- Non availability of ICU bed.

1.9 RECOMMENDATIONS:

1. OT booking

- a.* HMIS should used to book the cases for surgery.
- b.* OT should be booked one day prior to surgery till 6:00PM only.

2. Clearances, Investigation and Consent

3. PAC: Once the OT booking is done till 6:00 PM, Anesthetist should make sure that the PAC is done one day prior to surgery of all the booked cases. Moreover surgeon should

make sure one day prior to Surgery that PAC is done. Ideally PAC process should be smother and less time consuming.

Financial clearance

- i. OT booking should be done after getting the TPA approval only.
 - ii. In case there is change in care plan, Surgeon is suppose to inform the patient , so that TPA could be informed for the change in care plan on time otherwise, strict action should be taken from management for the defaulters
 - iii. For timely TPA approval, investigation report should be send to TPA on time. Nurses should send X-ray back to lab, for getting reports on time.
4. To avoid cancellation of case there can be charge some booking amount at the time of booking and also can give some discount on high value surgeries.
5. Branding of the hospital is required to increase the number of patient load of the hospital.
6. Increase the number of surgeons.

1.10 LIMITATIONS

1. *From patient's end*

There are many factors from the patient's end that cannot be controlled for avoiding the problem as delays, cancellation or postponements.

1. Late arrival of patient despite patient education and counseling.
2. Non submission of documents on time leading to late approval
3. Change in decision for having surgery

2. *Resistance to Change*

1. As the Surgeon's are not very much tech-savvy , It will be difficult for surgeons to acclimatize to OT- HMIS module
2. The surgeons are habitual to work according to their own convenience, therefore, adherence to protocol such as booking OT on time, on time starts, being punctual would be difficult.

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1.12 ANNEXURES:

Annexure 1

For the month of February:

DATE/NAME	OT	TIME IN (1)	TIME OUT (2)	SURGERY TIME 3 (2-1)	CLEANING TIME (4)	TOTAL TIME (3+4)
8-Feb-16						
Foju Singh	1	1:00 PM	2:30 PM	1:30	0:20	1:50
Nitin Kumar	1	3:30 PM	5:30 PM	2:00	0:20	2:20
9-Feb-16						
Ashok Tanwar	2	1:25 PM	4:00 PM	2:35	0:20	2:55
Shakuntala Devi	2	5:00 PM	8:10 PM	3:10	0:20	3:30
10-Feb-16						
Nahar Singh	2	9:10 AM	12:20 PM	3:10	0:20	3:30
Har Devi	2	1:00 PM	2:20 PM	1:20	0:20	1:40
Maya Devi	2	3:00 PM	6:00 PM	3:00	0:20	3:20
Mahesh Chand	2	8:00 PM	10:00 PM	2:00	0:20	2:20
11-Feb-16						
Krishna Suryrvandi	1	9:30 AM	2:20 PM	4:50	0:20	5:10
Bhanwari Devi	2	2:30 PM	7:30 PM	5:00	0:20	5:20
12-Feb-16						
Kailashi Devi	2	10:20 AM	1:00 PM	2:40	0:20	3:00
Kirti Badonia	2	4:00 PM	9:45 PM	5:45	0:20	6:05
13-Feb-16						
Subhash Saini	2	11:00 AM	3:00 PM	4:00	0:20	4:20
Krishna Suryrvandi	1	11:00 AM	2:30 PM	3:30	0:20	3:50
Deep Chand Saini	2	3:30 PM	7:00 PM	3:30	0:20	3:50
Uma Devi	1	6:30 PM	8:30 PM	2:00	0:20	2:20
15-Feb-16						
Chidiya Devi	2	12:00 PM	3:30 PM	3:30	0:20	3:50
Sohan Gupta	2	4:00 PM	10:45 PM	6:45	0:20	7:05
Suresh Saini	1	2:00 PM	4:00 PM	2:00	0:20	2:20
16-Feb-16						
Jeet Ram	2	12:40 PM	4:00 PM	3:20	0:20	3:40

17-Feb-16						
Mohd Irfan	2	1:10 PM	3:40 PM	2:30	0:20	2:50
Sohan Gupta	1	3:50 PM	4:30 PM	0:40	0:20	1:00
Gambhir Singh	2	7:10 PM	8:20 PM	1:10	0:20	1:30
18-Feb-16						
Pankaj Soni	2	11:00 AM	3:40 PM	4:40	0:20	5:00
Sonu Kedar	2	5:30 PM	8:05 PM	2:35	0:20	2:55
19-Feb-16						
Har Pyari Devi	2	9:50 AM	2:50 PM	5:00	0:20	5:20
Sebghat Ullah	2	3:00 PM	6:30 PM	3:30	0:20	3:50
Mahesh Yadav	1	6:40 PM	7:10 PM	0:30	0:20	0:50
20-Feb-16						
Bhagirath Choudhary	2	5:50 PM	6:30 PM	0:40	0:20	1:00
Sardar AQA	2	8:30 PM	8:50 PM	0:20	0:20	0:40
22-Feb-16						
Ganpat Ram Meghwal	2	11:10 AM	2:00 PM	2:50	0:20	3:10
Harendra Singh	2	3:00 PM	5:00 PM	2:00	0:20	2:20
Rabiya Bano	1	5:30 PM	8:30 PM	3:00	0:20	3:20
23-Feb-16						
Ram Singh	2	12:00 PM	4:30 PM	4:30	0:20	4:50
Sohan Gupta	2	5:30 PM	11:45 PM	6:15	0:20	6:35
24-Feb-16						
Mannv Kumar	2	11:30 AM	5:00 PM	5:30	0:20	5:50
Devendra Kumar	2	6:00 PM	6:30 PM	0:30	0:20	0:50
25-Feb-16						
Ram Dayal	2	11:30 AM	4:45 PM	5:15	0:20	5:35
Ram Pal Jat	2	5:30 PM	9:00 PM	3:30	0:20	3:50
26-Feb-16						
Gheesu Lal Mehta	2	10:30 AM	1:15 PM	2:45	0:20	3:05
Sheela Devi	2	2:00 PM	4:45 PM	2:45	0:20	3:05
Ramesh Kumar	2	6:00 PM	7:00 PM	1:00	0:20	1:20
27-Feb-16						
Devinder Kaur	2	11:00 AM	1:20 PM	2:20	0:20	2:40
Sajana Devi	2	2:15 PM	6:00 PM	3:45	0:20	4:05
29-Feb-16						
Mukesh Kumar	2	11:15 AM	1:15 PM	2:00	0:20	2:20
Sobhraj Mehta	1	2:15 PM	4:00 PM	1:45	0:20	2:05
Sohan Gupta	2	4:45 PM	6:45 PM	2:00	0:20	2:20

For the month of March:

DATE/NAME	O T	CASE	TIME IN (1)	TIME OUT (2)	SURG ERY TIME 3 (2-1)	CLEA NING TIME (4)	TOTA L TIME (3+4)
1-Mar-16							
Prashant Kumar	2	ELECTIVE LIST	11:30 AM	1:30 PM	2:00	0:20	2:00 AM
Rajanti Devi	2	ELECTIVE LIST	2:30 PM	5:30 PM	3:00	0:20	3:20 AM
Sohan Gupta	1	ELECTIVE LIST	6:00 PM	6:45 PM	0:45	0:20	1:05
2-Mar-16							
Dolat Ram	2	ELECTIVE LIST	11:30 AM	3:00 PM	3:30	0:20	3:50 AM
Satya Narayan Sharma	2	ELECTIVE LIST	3:45 PM	5:45 PM	2:00	0:20	2:20 AM
3-Mar-16							
Raj Kumar Saini	2	ELECTIVE LIST	10:15 AM	2:50 PM	4:35 AM	0:20	4:55 AM
Ram Pal Jat	2	ELECTIVE LIST	3:20 PM	6:30 PM	3:10 AM	0:20	3:30 AM
4-Mar-16							
Pradeep Tiwari	2	EMERGENCY	3:00 AM	4:30 AM	1:30 AM	0:20	1:50 AM
Manni Devi	2	ELECTIVE LIST	11:30 AM	2:30 PM	3:00 AM	0:20	3:20 AM
5-Mar-16							
Manju Devi	2	ELECTIVE LIST	12:00 PM	5:15 PM	5:15 AM	0:20	5:35 AM
Alish Datwani	2	ELECTIVE LIST	6:30 PM	10:30 PM	4:00 AM	0:20	4:20 AM
6-Mar-16							
Vijay Kumar Gupta	2	ELECTIVE LIST	9:00 AM	12:30 PM	3:30 AM	0:20	3:50 AM
7-Mar-16							
Manni Devi	2	ELECTIVE LIST	12:05 PM	4:00 PM	3:55 AM	0:20	4:15 AM
8-Mar-16							
Bajrang Lal Saini	2	ELECTIVE LIST	1:00 PM	4:00 PM	3:00 AM	0:20	3:20 AM
Sohan Gupta	2	ELECTIVE LIST	4:15 PM	6:30 PM	2:15 AM	0:20	2:35 AM
9-Mar-16							
Sobhraj Mehta	2	ELECTIVE LIST	11:00 AM	1:45 PM	2:45 AM	0:20	3:05 AM
Nawab Ali	2	ELECTIVE LIST	2:30 PM	5:30 PM	3:00 AM	0:20	3:20 AM
Hari Lal Meena	1	ELECTIVE LIST	6:30 PM	8:00 PM	1:30 AM	0:20	1:50 AM
Prahlad Singh	2	ELECTIVE LIST	9:00 PM	12:30 PM	3:30 AM	0:20	3:50 AM
10-Mar-16							
Hukum Chand	2	ELECTIVE LIST	4:00	5:00 PM	1:00 PM	0:20	1:20 PM
11-Mar-16							
Kishore Jakhar	2	ELECTIVE LIST	11:30 AM	1:00 PM	1:30 AM	0:20	1:50 AM

Sobhraj Mehta	2	ELECTIVE LIST	1:30 PM	4:30 PM	3:00 AM	0:20	3:20 AM
Prahlad Singh	2	ELECTIVE LIST	5:00 PM	8:45 PM	3:45 AM	0:20	4:05 AM
12-Mar-16							
Ankita Devi	2	ELECTIVE LIST	11:45 AM	2:10 PM	2:25 AM	0:20	2:45 AM
Kamlesh Kuamri	2	ELECTIVE LIST	2:30 PM	3:30 PM	1:00 AM	0:20	1:20 AM
Mithlesh Rathore	2	ELECTIVE LIST	4:00 PM	8:15 PM	4:15 AM	0:20	4:35 AM
Mukesh Kumar	1	ELECTIVE LIST	8:30 PM	9:45 PM	1:15 AM	0:20	1:35 AM
14-Mar-16							
Birma Jain	2	ELECTIVE LIST	1:00 PM	3:00 PM	2:00 AM	0:20	2:20 AM
Madam Lal Sharma	2	ELECTIVE LIST	3:15 PM	8:15 PM	5:00 AM	0:20	5:20 AM
15-Mar-16							
Mahendra Singh	2	EMERGENCY	3:30 AM	6:30 AM	3:00 AM	0:20	3:20 AM
Pankaj Luhadia	2	ELECTIVE LIST	11:30 AM	3:10 PM	3:40 AM	0:20	4:00 AM
Sagar Kanwar	1	ELECTIVE LIST	3:00 PM	4:50 PM	1:50 AM	0:20	2:10 AM
Manju Garg	2	ELECTIVE LIST	5:00 PM	9:50 PM	4:50 AM	0:20	5:10 AM
16-Mar-16							
Leela Ram Yadav	2	ELECTIVE LIST	10:30 AM	1:50 PM	3:20 AM	0:20	3:40 AM
Brijesh Sharma	2	ELECTIVE LIST	2:00 PM	3:30 PM	1:30 AM	0:20	1:50 AM
Chote Lal	2	ELECTIVE LIST	3:34 PM	8:20 PM	4:46 AM	0:20	5:06 AM
17-Mar-16							\
Sohan Gupta	2	ELECTIVE LIST	11:30 AM	1:30 PM	2:00 AM	0:20	2:20 AM
Mahendra Singh	2	ELECTIVE LIST	2:00 PM	5:30 PM	3:30 AM	0:20	3:50 AM
18-Mar-16							
Manoj Kumar	2	ELECTIVE LIST	10:00 AM	12:30 PM	2:30 AM	0:20	2:50 AM
Ramesh Devi	2	ELECTIVE LIST	1:00 PM	10:00 PM	9:00 AM	0:20	9:20 AM
19-Mar-16							
Manju Gupta	2	ELECTIVE LIST	11:15 PM	4:00 PM	4:45 AM	0:20	5:05 AM
Ramesh Devi	2	ELECTIVE LIST	4:30 PM	8:16 PM	3:46 AM	0:20	4:06 AM
21-Mar-16							
Naresh	2	ELECTIVE LIST	9:30 AM	12:30 PM	3:00 AM	0:20	3:20 AM
Lal Chand Sharma	2	ELECTIVE LIST	12:45 PM	5:00 PM	4:15 AM	0:20	4:35 AM
Ratan Lal	1	ELECTIVE LIST	4:00 PM	5:00 PM	1:00 AM	0:20	1:20 AM
Prahlad Singh	2	ELECTIVE LIST	5:20 PM	7:55 PM	2:35 AM	0:20	2:55 AM
Ram Prasad	2	ELECTIVE LIST	9:35 PM	11:00 PM	1:25 AM	0:20	1:45 AM
22-Mar-16							
Vicky	2	ELECTIVE LIST	11:30 AM	2:30 PM	3:00 AM	0:20	3:20 AM
Harpit Meena	1	ELECTIVE LIST	4:00 PM	5:00 PM	1:00 AM	0:20	1:20 AM
Arvind Chhabrrel	2	ELECTIVE LIST	5:30 PM	7:00 PM	1:30 AM	0:20	1:50 AM
23-Mar-16							
Harshit Choudhary	2	ELECTIVE LIST	11:00 AM	12:30 PM	1:30 AM	0:20	1:50 AM

Kundan Singh	2	ELECTIVE LIST	1:30 PM	4:00 PM	2:30 AM	0:20	2:50 AM
Sharvan Lal Meena	1	ELECTIVE LIST	2:00 PM	4:00 PM	2:00 AM	0:20	2:20 AM
Prahlad Singh	2	ELECTIVE LIST	5:00 PM	5:30 PM	0:30	0:20	12:50 AM
25-Mar-16							
Sunita Yadav	2	ELECTIVE LIST	11:30 AM	4:00 PM	4:30 AM	0:20	4:50 AM
Vijay Kumar Sharma	1	ELECTIVE LIST	4:15 PM	6:15 PM	2:00 AM	0:20	2:20 AM
Arvind Chhabrrel	2	ELECTIVE LIST	6:00 PM	8:00 PM	2:00 AM	0:20	2:20 AM
26-Mar-16							
Iqbal Khan	2	ELECTIVE LIST	11:45 AM	2:30 PM	2:45 AM	0:20	3:05 AM
Ram Gopal Yadav	2	ELECTIVE LIST	3:30 PM	7:30 PM	4:00 AM	0:20	4:20 AM
28-Mar-16							
Kundan Singh	2	ELECTIVE LIST	11:45 AM	2:15 PM	2:30 AM	0:20	2:50 AM
Birma Ram Bhati	1	ELECTIVE LIST	3:00 PM	5:30 PM	2:30 AM	0:20	2:50 AM
29-Mar-16							
Ishwar Lal Gurjar	2	ELECTIVE LIST	10:45 AM	7:30 PM	8:45 AM	0:20	9:05 AM
30-Mar-16							
Bimla Devi Sharma	2	ELECTIVE LIST	11:45 AM	3:00 PM	3:15 AM	0:20	3:35 AM
Gopal Lal Sharma	2	ELECTIVE LIST	4:30 PM	6:45 PM	2:15 AM	0:20	2:35 AM
31-Mar-16							
Suraj Devi	2	ELECTIVE LIST	1:30 PM	6:30 PM	5:00 AM	0:20	5:20 AM

For the month of April:

DATE/NAME	O T	CASE	TIME IN (1)	TIME OUT (2)	SURGE RY TIME 3 (2-1)	CLEA NIN G TIME (4)	TOTAL TIME (3+4)
1-Apr-16							
Ramesh Singh	2	Elective Case	12:05 PM	2:15 PM	2:10 AM	0:20	2:30 AM
Arpit Gurjar	2	Elective Case	3:00 PM	8:15 PM	5:15 AM	0:20	5:35 AM
2-Apr-16							
Shree Narayan Meena	1	Elective Case	10:15 AM	11:15 AM	1:00 AM	0:20	1:20 AM
Mahaveer Prasad	2	Elective Case	11:30 AM	2:00 PM	2:30 AM	0:20	2:50 AM
Madan Lal	2	Elective Case	2:30 PM	5:00 PM	2:30 AM	0:20	2:50 AM
Ram Kirpa Mishra	1	Elective Case	4:30 PM	9:00 PM	4:30 AM	0:20	4:50 AM
4-Apr-16							
Nahar Singh Rathore	2	Elective Case	12:05 PM	1:30 PM	1:25 AM	0:20	1:45 AM
Sugan Chand	2	Elective Case	2:30 PM	5:00 PM	2:30 AM	0:20	2:50 AM
5-Apr-16							
Hansraj Gurjar	1	Emergency	3:20 AM	6:00 AM	2:40 AM	0:20	3:00 AM
Sanjeev Agarwal	2	Elective Case	12:05 PM	2:45 PM	2:40 AM	0:20	3:00 AM
Shabham Bano	2	Elective Case	3:00 PM	4:15 PM	1:15 AM	0:20	1:35 AM
Ramswaroop Gurjar	2	Elective Case	5:00 PM	7:10 PM	2:10 AM	0:20	2:30 AM
6-Apr-16							
Gopal Lal Sharma	1	Elective Case	1:20 PM	2:00 PM	12:40 AM	0:20	1:00 AM
Krishan Kumar Gurjar	1	Elective Case	3:00 PM	8:00 PM	5:00 AM	0:20	5:20 AM
7-Apr-16							
Mathara Devi	2	Elective Case	12:05 PM	2:00 PM	1:55 AM	0:20	2:15 AM
Chandrabhan Saini	2	Elective Case	3:00 PM	4:50 PM	1:50 AM	0:20	2:10 AM
8-Apr-16							
Deep Singh Shekhawat	2	Elective Case	1:30 PM	2:00 PM	12:30 AM	0:20	12:50 AM
Ishwar Lal Gurjar	2	Emergency	3:30 PM	7:00 PM	3:30 AM	0:20	3:50 AM
Arvind Chhabrrel	1	Elective Case	2:30 PM	3:00 PM	12:30 AM	0:20	12:50 AM

Sanjay Sharma	2	Elective Case	8:30 PM	10:30 PM	2:00 AM	0:20	2:20 AM
9-Apr-16							
Mishri Devi	2	Elective Case	9:00 AM	12:15 PM	3:15 AM	0:20	3:35 AM
Sandeep Yadav	2	Elective Case	12:30 PM	3:00 PM	2:30 AM	0:20	2:50 AM
11-Apr-16							
Pawan Chhipa	2	Emergency	12:30 PM	1:30 PM	1:00 AM	0:20	1:20 AM
Kailash Devi	2	Elective Case	3:00 PM	4:00 PM	1:00 AM	0:20	1:20 AM
12-Apr-16							
Ashok Kumar Meena	2	Elective Case	11:45 AM	2:00 PM	2:15 AM	0:20	2:35 AM
Priyanshu Bagdiya	2	Elective Case	2:30 PM	6:00 PM	3:30 AM	0:20	3:50 AM
13-Apr-16							
Sunita Kunwar	2	Elective Case	11:55 AM	1:30 PM	1:35 AM	0:20	1:55 AM
Hussain Khan	2	Elective Case	4:00 PM	7:00 PM	3:00 AM	0:20	3:20 AM
14-Apr-16							
Sharda	2	Emergency	9:00 AM	10:30 AM	1:30 AM	0:20	1:50 AM
Sunita Grover	2	Elective Case	11:30 AM	1:30 PM	2:00 AM	0:20	2:20 AM
15-Apr-16							
Suresh Kumar	2	Elective Case	11:50 AM	3:00 PM	3:10 AM	0:20	3:30 AM
Rajveer Singh	2	Elective Case	3:30 PM	6:30 PM	3:00 AM	0:20	3:20 AM
Suman Sharma	1	Elective Case	6:00 PM	9:45 PM	3:45 AM	0:20	4:05 AM
16-Apr-16							
Kailash Chand	2	Elective Case	10:30 AM	1:00 PM	2:30 AM	0:20	2:50 AM
Sweety Jaisansaria	2	Elective Case	1:15 PM	3:00 PM	1:45 AM	0:20	2:05 AM
Shanti Devi	2	Elective Case	3:15 PM	8:30 PM	5:15 AM	0:20	5:35 AM
18-Apr-16							
C.Vikram Singh	2	Elective Case	12:15 PM	5:05 PM	4:50 AM	0:20	5:10 AM
19-Apr-16							
Sohan Lal Malakar	2	Elective Case	1:00pm	4:30 PM	3:30 PM	0:20	3:50 PM
Satish Kumar	1	Emergency	3:00 PM	3:30 PM	0:30	0:20	0:50
20 april 201							
Manti Devi	2	Elective Case	12:05 PM	4:30 PM	4:25 AM	0:20	4:45 AM
Uma Sharma	2	Elective Case	5:00 PM	7:30 PM	2:30 AM	0:20	2:50 AM
22-Apr-16							
Priyanka	2	Elective Case	12:15 PM	2:50 PM	2:35 AM	0:20	2:55 AM
Bansi Lal Saini	2	Elective Case	3:00 PM	4:30 PM	1:30 AM	0:20	1:50 AM
Vijay Ram	1	Elective Case	5:15 PM	7:00 PM	1:45 AM	0:20	2:05 AM
23-Apr-16							
Vinod Singh	1	Emergency	8:30 AM	4:00 PM	7:30 AM	0:20	7:50 AM
Ramsavroop	2	Elective Case	2:30 PM	3:30 PM	1:00 AM	0:20	1:20 AM

Tinku Devi	1	Elective Case	4:30 PM	5:30 PM	1:00 AM	0:20	1:20 AM
Sugan Chand	2	Elective Case	4:00 PM	8:30 PM	4:30 AM	0:20	4:50 AM
Hera Devi	1	Elective Case	7:30 PM	8:00 PM	12:30 AM	0:20	12:50 AM
25-Apr-16							
Chandra Vikram Singh	2	Elective Case	4:30 PM	5:00 PM	12:30 AM	0:20	12:50 AM
26-Apr-16							
Khushi Kumai	2	Emergency	9:00 AM	10:00 AM	1:00 AM	0:20	1:20 AM
27-Apr-16							
Khushi Kumai	2	Elective Case	2:00 PM	8:00 PM	6:00 AM	0:20	6:00 AM
28-Apr-16							
Gendala Bhati	2	Emergency	9:00 AM	11:15 AM	2:15 AM	0:20	2:35 AM
Sharda	1	Elective Case	12:05 PM	12:40 PM	0:35	0:20	12:55 AM
Goverdhan Prasad	2	Elective Case	11:30 AM	3:30 PM	4:00 AM	0:20	4:20 AM
Vinod Singh	1	Elective Case	3:45 PM	7:00 PM	3:15 AM	0:20	3:35 AM
29-Apr-16							
Hemraj Jat	2	Elective Case	10:30 AM	12:50 PM	2:20 AM	0:20	2:40 AM
Suman Devi	2	Elective Case	1:45 PM	7:30 PM	5:45 AM	0:20	6:05 AM
30-Apr-16							12:00 AM
Sita Devi	2	Elective Case	11:30 AM	3:45 PM	4:15 AM	0:20	4:35 AM
Muskan	2	Elective Case	4:00 PM	10:00 PM	6:00 AM	0:20	6:20 AM