"ROLE OF PROJECT MANAGEMENT AND CUSTOMER SERVICE CELL"

BY

Manali Sahu

Summer training report submitted for the partial fulfilment of the

MBA Pharmaceutical Management

Academic year, 2014-2016

INSTITUTE OF HEALTHMANAGEMENTAND RESEARCH

INSTITUTE OF HEALTH
MANAGEMENT RESEARCH
(WHO Collaborating Centre for District Health System Based on Primary Health Care)

IIHMR UNIVERSITY

CERTIFICATE

This is to certify that **Ms. Manali Sahu** , a student of MBA Pharmaceutical Management, IIHMR University, Jaipur, Batch 2014-2016 has successfully completed her summer training for the period from April 15th to June 5th , 2015 at Stabicon life sciences Pvt.Ltd, Bengaluru under my guidance. During this period she has completed a study titled **"Role of Project management & Customer service cell" Management**. During the above period we found , she is sincere, hard working , taken proper initiative and efforts towards completing her training.

I wish her all the best for future endeavours.

Col. (Dr) Ashok Kaushik

Dean (Academics & Student Affairs)

IIHMR University, Jaipur

Rahul Sharma

Assistant Professor

IIHMR University, Jaipur

Stabicon Life Sciences Pvt. Ltd.

SLS/PT/2015-16

Date: 05th June 2015

TO WHOMSOEVER IT MAY CONCERN

Ref: IIHMR/MBA/-PM 6/Bona/2015, Date 6th April 2015

This is to certify that **Ms. Manali Sahu,** student of **MBA - Pharmaceutical Management** from Institute of Health Management Research (**IIHMR**) has successfully completed her field work in our Organization.

She had undergone her training from **15th April 2015** to **05th June 2015.**

During the above period we found, she is sincere, hard working, taken proper initiative and efforts towards completing her training.

"WE WISH HER ALL THE BEST FOR HER FUTURE CAREER"

For Stabicon Life Sciences Pvt. Ltd.

Kishore Shenoy P

Dr.Kishore Shenoy P
Vice President – Operations

Plot No. 28, Bommasandra Industrial Area (Sub-layout), 4th Phase, Jigani Hobli, Anekal Taluk, Bangalore-560 100. Tel: +91 80 27839259/60
E-mail : info@stabicon.com website : www.stabicon.com

ACKNOWLEDGEMENT

The success of any task would be incomplete without the expression of appreciation of gratitude to the people who made it possible .Though words fall short to express the sincere gratitude towards everyone who helped directly or indirectly in my endeavor. It is a pleasant aspect that I now have the opportunity to express my gratitude for all of them. This is a humble attempt in this regard. I would like to render my sincere thanks to Indowestern Brain and Spine Hospital, Jaipur for providing me with such unique learning experience.

I convey my deep and sincere thanks to Dr. Ashok Kaushik (Dean Academic and Student Affairs) and My Mentor Rahul sharma for being helpful, supportive and receptive.

.

Without their co-operation and warm attitude this project would have been a distant dream.

Manali Sahu

TABLE OF CONTENTS

Contents

SUMMER TRAINING REPORT 4

1.0 EXECUTIVE SUMMARY: 5

1.1 INTRODUCTION 6

1.2 LITERATURE REVIEW 7

1.3 JUSTIFICATION OF STUDY 9

1.6.2 PROCESS FLOW: 10

1.7 DATA ANALYSIS: 11

1.7.1 Data analysis for estimation of OT utilization rate: 11

1.7.2 Number of cases Postponed for the Month of April 12

1.7.3 Data to show the time of different Month : 13

1.8 CONCLUSION: 16

1.8 RECOMMENDATIONS: 16

1.9 LIMITATIONS 17

1.11 REFERENCES: 18

SUMMER TRAINING REPORT

ROLE OF PROJECT MANAGEMENT AND CUSTOMER SERVICE CELL

1.0 EXECUTIVE SUMMARY:

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

In Quality Assurance Meeting, the problem of scheduling with the problem of postponement/delays and problem of same day scheduling.

As a Organization 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.

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 dine 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

1.6.2 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 the 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.

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.

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 1: Process flow for the TPA patients:

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:

For the month of February,

Total available hours= 152

Total time taken for surgery and cleaning of OT= 129

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

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

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

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 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 was one of the factor contributing to the under utilization of the operation theatre.

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 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 starts after 10AM. Delay in the cases is the major factor that contributes to the under utilization of the operation theatre.

Figure 2: Delay in start time of 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 either have to be changed or the scheduling of the cases has to be corrected.

1.7.6 Gaps identified and analyzed:

1. In 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 form 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 is functional for 10am to 6pm.due to the emergency cases any elective case in between the hours has to be postponed or rescheduled. Thus there is lack of surgeons, due to which elective cases are delayed.

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.

1.8 RECOMMENDATIONS:

a. HMIS should used to book the cases for surgery.

b. 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. 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.

1.9 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.

1.11 REFERENCES:

[1] Malhorta, V. (2006). What should anesthesiologists know about operating room management.*Revista medicacane de anestesiologisia*, 29: S83-S88.

[2] McIntosh, C., Dexter, F. & Epstein, R. (2006). The impact of service-specific staffing, case scheduling, turnovers, and first case starts on anaesthesia group and operating room productivity: A tutorial using data from an Australian hospital. *International Anaesthesia Research Society*, 103:1499-1516.

[3] Park, K.W. & Dickerson, C. (2009). Can efficient supply management in the operating room save millions? *Current opinion Anaesthesiology*, 22: 242-248.

[4] Dexter, F., Ledolter, J. & Wachtel, R. (2005). Tactical decision making for selective expansion of operating room resources incorporating financial criteria and uncertainty in subspecialties' future workloads. *Anesth Analg*, 100: 425-432.

[5] Dexter, F., Epstein, R., Traub, & Xiao, Y. (2004). Making management decisions on the day of surgery based on operating room efficiency and patient waiting times. *Anesthesiology*, 101: 1444 1453.

[6] Dexter, F. & Traub, R.D. (2002). How to schedule elective surgical cases into specific operating rooms to maximize the efficiency of use of operating room time. *Anesth Analg*, 94: 933-942.

[7] McIntosh, C., Dexter, F. & Epstein, R. (2006). The impact of service-specific staffing, case scheduling, turnovers, and first case starts on anaesthesia group and operating room productivity:

A tutorial using data from an Australian hospital. *International Anaesthesia Research Society*, 103: 1499-1516

[8] Macario, A. (2010). Are your operating rooms being run efficiently? Medscape *Anesthesiology*

[9] J.T. Blake and M.W. Carter. Surgical process scheduling: A structured review. *Journal of Health Systems*, 5 (3):17{30, 1997.[12]

[10] Z. Przasnyski. Operating room scheduling: A literature review. *AORN Journal*, 44 (1):67{79, 1986.