Summer Training

in

Manipal Hospital,Jaipur

(April 6 to June 06th, 2015)

- Study Bill estimation process and Quality analysis
- Study Bed Utilization in Dialysis Department

A Report

By

Dr Kartik Gupta

IIHMR UNIVERSITY

MBA Hospital and Health Management

2014-2016

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 Dr.Kartik Gupta has undergone summer training at MANIPAL HOSPITAL, Jaipur from 6th April to 5th June 2015.

The candidate has himself carried out all the studies related to the summer training. His approach to the studies has been sincere, scientific and analytical. This summer training is a course requirement recommended before awarding the degree of Masters In Business Administration (MBA) in Health and Hospital Management.

I wish him success in all his future endeavors.

Col. (Dr.) Ashok Kaushik
Dean (Academic & Student Affairs)
IIHMR University, Jaipur

Dr.Alok Mathur
Professor
IIHMR University, Jaipur

1, Prabhu Dayal Marg, Near Sanganer Airport, Jaipur- 302029, Rajasthan, India.
Ph.: 0141- 3924700, 2791431- 32, Fax: 0141 3924738, E-mail: iihmr@iihmr.edu.in, Web.: www.iihmr.edu.in

ManipalHospitals
LIFE'S ON

SMH/HR/2015/TP/128

6th June 2015

To Whomsoever It May Concern

This is to certify that **Dr. Kartik Gupta** has successfully completed 60 days training at **Quality Control** department in our Hospital, under the supervision of Ms. Akshita Shah.

Project: To Study Bill Estimation & Method to Improve Quality Indicator & To Estimate Dialysis Utilization in Dialysis Department.
Duration of Training: - April 06, 2015 to June 05, 2015.

During this period we found him very sincere and hard working.

We wish him all the best for his future endeavors.

For Soni Manipal Hospital
(A Unit of Manipal Hospitals (Jaipur) Pvt Ltd

Nagendra Kumar
Deputy Manager-HR

Soni Manipal Hospital
A Unit of Manipal Hospitals (Jaipur) Private Limited
Sector 5, Vidhyadhar Nagar, Jaipur 302 013
P +91 141 5164 000 www.manipalhospitals.com
CIN: U85110KA2014PTC073085

Acknowledgements:

At the onset of the report I would like to express my special gratitude and appreciation Mr Varun Sharma,Unit Head for allowing me to pursue my summer internship from Manipal Hospital,Jaipur.

I would also like to acknowledge with much appreciation the crucial role of Ms Akshita Shah,Quality Head, Manipal Hospital who despite of other pre occupations and busy schedule was there to guide me and whose stimulating suggestions and encouragement helped me complete my training.

This training wouldn't have been completed without a substantial support from various departments and other staff members at Soni Manipal Hospital for being so helpful all the time and making this summer training project an unforgettable experience.

I express my gratitude and respectful regards to my mentor Prof. Alok Mathur, IHMR, Jaipur for his able guidance and useful suggestions, which helped me in completing the project work ..

I would also like to thank my institution and faculty members without whom this project would have been a distant reality.

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Abbreviations :

OPD	Out Patient Department
IPD	In Patient Department
ACLS	Advanced Cardiac Life Support
BLS	Basic Life Support
MICU	Medical Intensive Care Unit
HDU	High Dependency Unit
NICU	Neonatal Intensive Care Unit
CCU	Cardiac Care Unit
CSSD	Central Sterile & Supply Department
IABP	Intra Aortic Balloon Pump
MRI	Magnetic Resonance Imaging
CT	Computer Tomography Scan

INTRODUCTION

The focus at Manipal Hospital is to develop an affordable tertiary care multispecialty healthcare framework through its entire delivery spectrum and further extend it to homecare.

Over the last few years, They have not only focused on treatment delivery but also at the quality aspect, and hence have the honor of having Manipal Hospital NABL accredited hospital.

Its Clinical Excellence is rooted in their excellent team of doctors/medical specialists who are well versed with the latest advancements in their respective field of medical expertise This is further complemented by their teams of highly trained nurses and paramedical people.

At Manipal Hospital, They are at the leading edge of technological advancements in the medical world. This, along with state-of-the-art infrastructure and facilities, the finest minds in Rajasthan and a genuine desire for providing the best healthcare drives us to deliver path-breaking care for their patients on a day-to-day basis. From the smallest to the most complex medical problems, They pride themselves in the way they deliver healthcare.

Manipal Hospital is a name synonymous to emergency care in this part of the country. With the largest number of ICU beds among all the public & private hospitals in the state, Manipal Group of Hospitals is the most preferred destination for all kinds of emergency treatments. As part of the

overall endeavor to improve surgical and critical care outcomes across the Hospitals operations – a first of its kind in Rajasthan - unified policies for the control of infection and the development of resistant strains of microorganisms have been formulated and implemented over the years. Consultation with our doctors starts with fixing up an appointment either by phone call or by visiting our hospitals in person, after which you will be given a Manipal record file and a unique Identification number which you can use for your subsequent visits.

Philosophy :

The ethos of Manipal Hospitals is its belief in the credo of its triad of core values namely "Clinical Excellence, Patient Centricity and Ethical Practices" which have led to it becoming one of the best and most trusted healthcare providers in the country today.

Amenities:

Amenities at Manipal hospital are among the best you can ever find in India. Here are some of the essential amenities you can find in manipal hospitals:

- Critical care at this Hospitals is provided by multi-professional team of highly experienced professionals in coordination with primary physician who use their unique expertise, ability to interpret important therapeutic information, access to highly sophisticated equipment and the services of support personal care that leads to the best outcome for the patients.
- Transport-Emergency ambulance services round the clock for immediate pick up/drop
- Special Nurse - If any sick or old patient wants special care we can have a special nurse assist you whenever you need help. Just contact their desk, and they will arrange a special nurse immediately.
- Well-maintained canteens - Their canteens are equipped with modern canteen facilities where you will get a variety of foods and beverages to refresh yourselves.
- 24 Hours service - Complete 24 Hour support from NICU and Intensive care facilities, Blood bank, Operation Theatre, Anesthesia and Laboratory services.
- Maternity facilities – They have exclusive facilities in our Maternity. It includes birthing suite, Labour delivery rooms, Diagnostic Fetal CTG, labour analgesia.
- Management of high risk pregnancy is done safely and carefully here.

Specialties:

Accident & Emergency:

The Department of Accident and Emergency care is a 24-hour fully-equipped medical centre which caters to all kinds of accident victims and emergency cases. After providing this initial, but very critical medical help the patient is shifted to the required specialised department for further treatment. If not required, the patient is discharged after the emergency is treated and the required medication is given.

The department is responsible for informing the Police in case of trauma, Poisoning,Suicide,Homicide,rape,assault etc.and notification of all noticeable disease to BMC.

There were 5 Beds two of these are well equipped with defibrillators, Capnograph,Monitors,Ventilators,suction apparatus and other life support systems manged round the clock by efficient doctors and sisters.

There are 3 Amabulances, One with ACLS and two with BLS facility.

Staff :

6 Resident Doctors,1 Incharge,11 Nurses.

Clinical Services :

Outpatient Department:

OPD is one of the most important department of Hospital it is the first contact point patient and hospital.

OPD department of Manipal Hospital is divided into two parts :

OPD 1- Ground Floor with 18 Consultation rooms

OPD 2- First Floor with 18 Consultation rooms.

Access to OPD Services :

All patients who visit the Hospital first time for counsultation/other services registration form is been generated with CR number present on the form.

OPD Appointment :

Appointmnet can be fixed over the telephone to the call centre or personally to the reception counter. (QUICKWELL Appointment system)

QUICKWELL Appointment system :

It is a new software developed by Manipal Hospital where patient can fix their appointment on call to Toll free number and a particular time slot is issued to patient from doctors counsultation hours.

In Patient Department:

In patient department of manipal hospital is spread over ground floor,first,second and third floor they are as follows :

Floor	Ward	Number of Beds
Ground	Male,Female,Surgical,Oncology	66 Beds
First	N ICU	6 Beds
Second	MICU,HDU,Neuro ICU,CCU	46 Beds
Third	Semi Delux/Delux	12 Beds

Each IPD has a patient call monitor to respond immediately to the patient call from the respective beds of semi deluxe/deluxe rooms.

Manipal SEAROC

Manipal SEAROC Comprehensive Cancer Centre is a centre of excellence for cancer care and adopts a multi-disciplinary team approach. It hosts full-fledged departments of Surgical Oncology, Radiation Oncology, Medical Oncology and Clinical Haematology, all co-existing with the entire gamut of super-specialties such as Neurosurgery, Plastic and Reconstructive Surgery, Urology, Maxillofacial Surgery, Histopathology, Nuclear Medicine, Immunology, Transfusion Service and state-of-the-art Intensive Care Unit. In addition, this centre also offers Palliative Care and Preventive Oncology services. In short, the Manipal SEAROC Comprehensive Cancer Centre is a one-stop solution, which provides comprehensive cancer care.

Support Services :

Lab Science Department:

It is a state-of-the-art Laboratory Diagnostic facilities for the comprehensive diagnosis of Clinical Pathologic, Hematological, Histo and Cytopatholoic and Microbiological diseases and the highest quality of clinical care for our patients with the latest available Diagnostic Equipment. The hospital's in house laboratoryhas an extensive test menu meant to cater to the hospital's vast range of super specialties. The laboratory attempts to provide under one roof, a range of tests, numbering over 1000, based on 95 technologies, covering most diseases known to man. The department participates in and holds many Continuing Medical Education (CME) programmes and conferences.

CSSD :

Introduction :

The Department is located in basement adjacent to Laundry services. Department is divided into 3 parts : dirty area,clean area and sterile area.

Different types of sterilizers are present they are as follows:

- Steam Autoclave (manually operated)
- Ethylene Oxide Sterilizer for disposable items.

The department is also responsible for maintaining sufficient stock level of all surgical instruments,drapes and other accessories required for surgical procedure in good condition. Following types of items are sterilized :

- Surgical Instruments
- Catheters (rubber)
- Linen
- Dressing materials
- Laparoscopic instruments
- PVC Tubings etc

Standard Operating procedures:

Cleaning activity – Floor mopping,surface cleaning,AC Duct cleaning-2.5 % hygenol

Quality Checks – each cycle graph is analysed, Color change of biological indicator,color change of indicator of Ph

Resterlization of CSSD Goods.

Imaging Department :

Imaging Department is a diagnostic department where various investigation of the patients are done.Both IPD &OPD patients come for investigation either through an appointment or walk in patient.

Imaging department can be divided into 5 sections namely :

- X ray (general radiology)
- Ultrasonography
- Computed Tomography Scan (CT Scan)

- Color Doppler
- MRI(Magnetic resonance Imaging)

Imaging department is located in the basement.The reception counter for registration and billing of all investigation are taking place at main Registration counter at ground Floor.

Objectives of the department :

- To do quality imaging using all necessary safety measures in radiation
- Perform quality reporting and interacting with clinicians on regular basis through follow ups.
- Monitor work of all technicians on regular basis to maintain as well as improve quality
- Interact with bio medical department on regular basis for upkeep of all equipments.

Cath Lab :

The department deals with services which can be both diagnostic for detection of the disease and therapeutic, on the basis of diagnostic findings.It covers mainly

- Coronary Angiography(radial,femoral packages)
- Intra aortic Balloon Pump(IABP)
- Temporary pacemaker
- Cardiac catheterization
- Pericardial tapping
- Aerogram
- Combo Coronary Angiography
- Balloon angiography
- Permanent pacemaker
- Valvuloplasty.

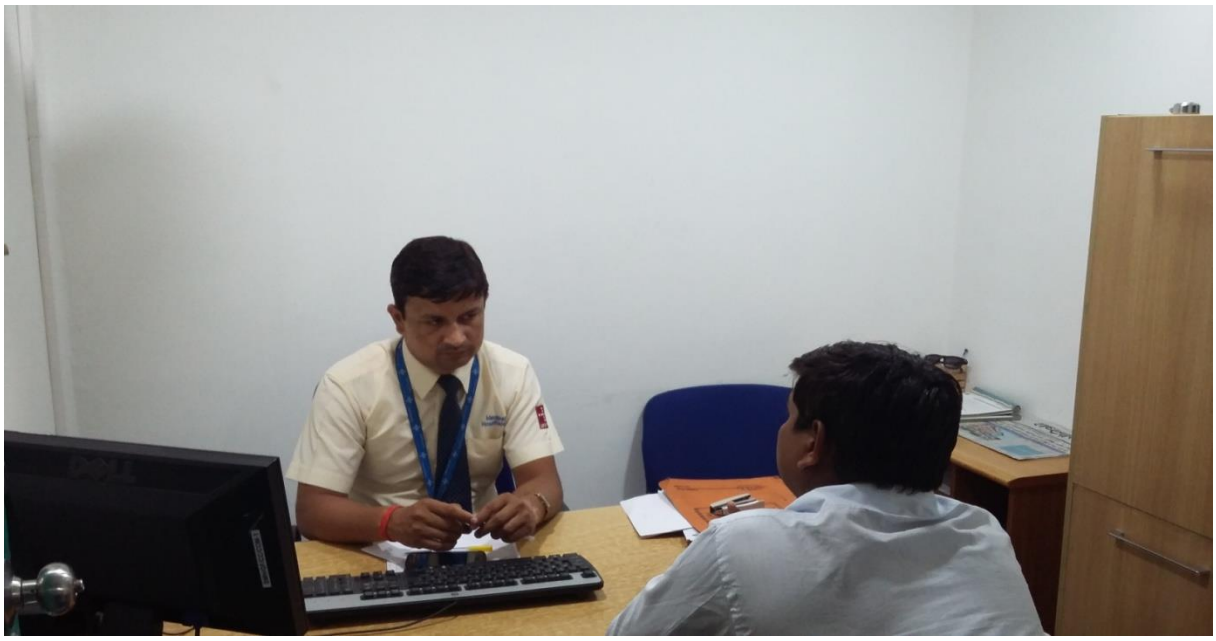
Bill estimation process and Quality analysis at Manipal Hospital

Introduction

Policy on estimation of bill along with revision:

Arriving at an approximate cost of care during hospitalization of a patient is called estimation of bill.

Financial Counselor desk,Manipal Hospital,Jaipur



Expected outcome

- Billing policy of the hospital is appropriately explained to the patient and a financial consent is taken and documented and signed by the admission staff
- To provide an estimate cost of the treatment at the time of admission for the selected ward
- Periodic review of the bill against the estimate provided to the patient

- To provide re-estimation when the bill crosses 90% of the initial estimate
- To give the updated information along with reasons to the patient
- To create packages for the top 5 surgical procedures/ departments

INDICATORS FOR MEASUREMENTS

- Percentage of admissions those are aware of billing policies during the audit
- Percentage of times financial consent was taken, documented and signed by patient for Initial estimation
- Percentage of cases where re-estimation given
- Percentage of times financial consent was taken, documented and signed by patient for Re-estimation
- Percentage of times estimated bill match the actual bill (+10% of the Initial estimation)
- Percentage of times estimated bill match the actual bill (+10% of Re-estimation)
- Percentage of customer satisfaction index on billing information given

1. **Scope**

Applicable to cash & corporate patients only and Insurance patients not under the scope (All units across MHEPL)

2. POLICY

The hospital needs to have uniform pricing structure in a given setting, which depends on the category of the beds to which the patient is admitted. There should be a room charges available at a particular location for public knowledge, which defines the price for hospital stay at different categories of room. Whenever there is a change in the room charges this shall be updated

Patients are educated about their approximate costs before admission by the concerned doctor / staff based on the room category and treatment plan. The same is documented in the admission request form.

Patients are also communicated regarding their daily bills / out standings by the concerned staff.

The re-estimation shall be given to patients when the running bill crosses 90% of the initial estimate and expected to cross 110% of the initial estimate.

Whenever there is a change in the estimated cost due to a change in the patient's condition or treatment requirement or ward category, the same is communicated to the patient by the concerned doctor / staff and the written consent is taken.

Cases like dialysis/ chemotherapy which doesn't require formal admission or require repeated/ regular visits are not under the scope.

For the procedures decided on bed like Angiogram to Angioplasty; estimate for pre and post procedure should be given.

Note: In order to arrive at the closest estimate possible, most common procedures (Top 5 procedures from each speciality) can be identified and offered as a package deal to the patients.

3. **Process**

- An Initial estimate of bill to the patient based on category of room and treatment plan is given & entered in the admission form.

- The patients are clearly explained that this is only initial estimation and the possibility of cost change due to various variable factors such as change in ward category, change in treatment setting, patient complications etc., Patients are educated about the inclusions and exclusions in the bill estimate.

- Patient consent is taken for the Admission and initial estimation and collect the payment.

- the bed is allotted and the patients are guided to the respective ward

- If they are unable to pay immediately they are given time to make the payment & same shall be documented and patients signature to be taken

- During the stay of the patient, inform the running bill to patient periodically including Sundays and holidays

- Re estimated cost has to be communicated to the patient when the running bill crosses 90% of the Initial estimate and expected to cross 110% of initial estimate.

Note: The same procedure is followed to corporate patients. If the patient has the cashless facility, patients need not to pay the cash.

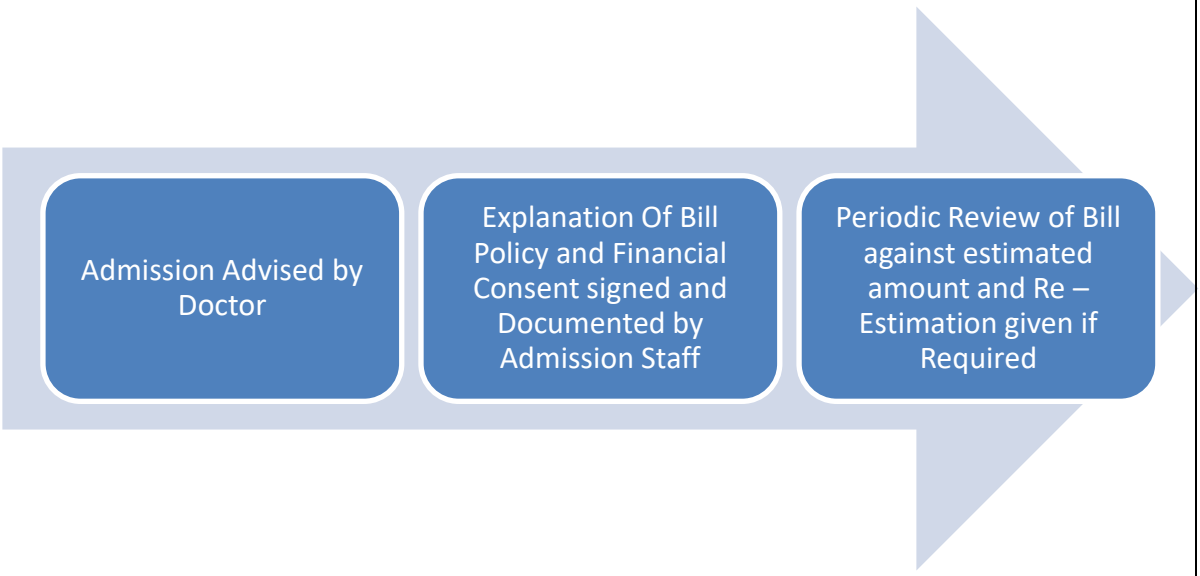
Objective

- To Study The Bill Estimation process given at the time of Admission and the process of re-estimation in Soni Manipal Hospital, Jaipur.
- Analyze Quality Indicators of Bill Estimation process for the month of April 2015.
- Identification of various methods to improve the Estimation Process.

Methodology

- Study Area :- Financial Counselor Desk,Soni Manipal Hospital
- Study Design :- Exploratory Study
- Study Duration:- Pre Intervention (1-31 April'15),Post Intervention (27 May-4 Jun'15)
- Sample Size :- 242 (Private patients)
- Sampling Method:- Purposive/Non probability sampling

Bill Estimation Process:-



- Approximate cost of care during Hospitalization of a patient.
- One of the 18 Commandments of Quality in Manipal Hospital and according to previous record we are able to analyse that this is one of the poor performing Quality indicator so research is needed how can we improve performance of Bill estimation process.

Data Collection Tool

- Primary Data:- Data gathered from patient admission documents which include bill estimation consent form on daily basis from the financial desk. And final bill amount from WIPRO HIS of Soni Manipal Hospital.
- Below format of excel sheet is maintained for all patients:-

UHID No	Patient Name	Admission Date	Discharge date	Estimated Amount	Net Bill amount	Variation in amount	% Variation

Data Analysis:-

Variation is calculated for all patients and divided into two main category:

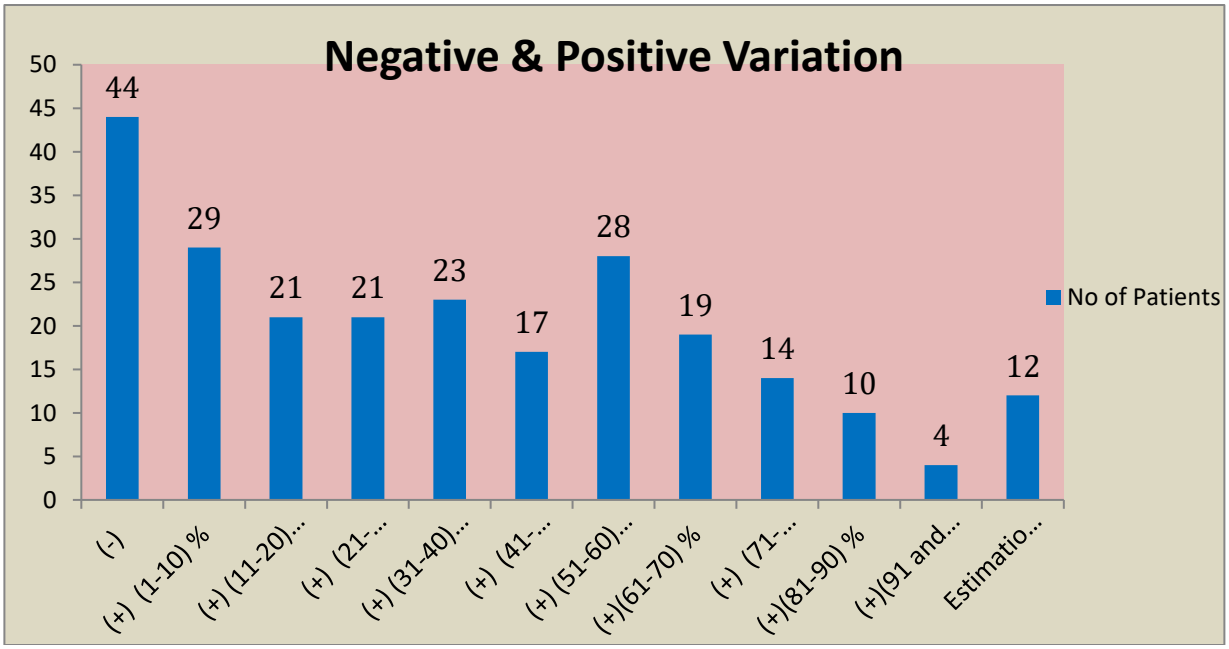
Positive variation

- Positive Variation (+): Final Bill of Hopitalization of patient matches or below the Estimated Amount.
- = Variation in bill amount * 100
- Estimated amount

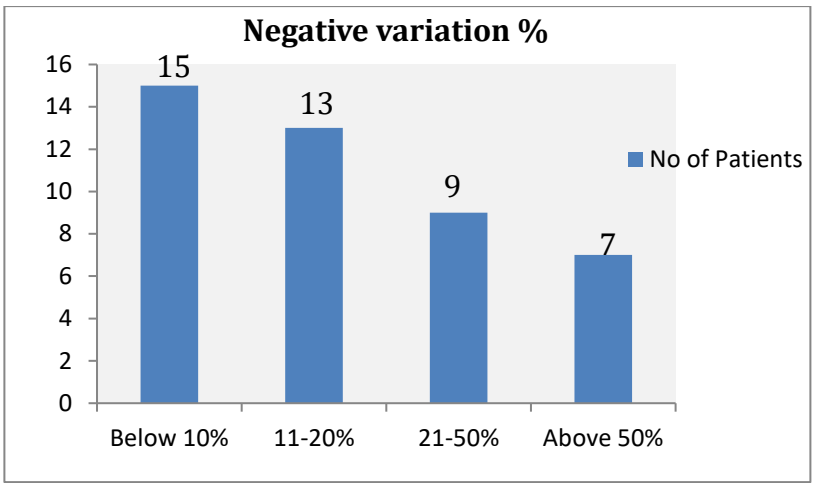
Negative Variation

- Negative Variation (-) :Final Bill of Hospitalization of patient doesn't matches and above the Estimated Amount.
- = Variation in bill amount * 100
- Net Bill amount

Overall Variation



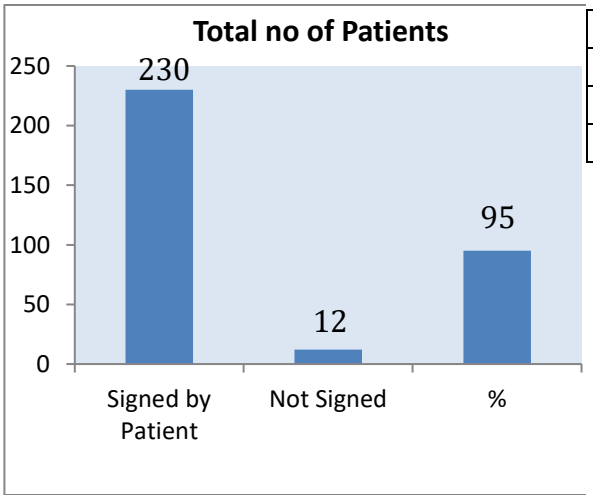
- Above Image shows presence of Negative variation in 44 Patients out of 242 patients and rest distribution of positive variation.
- There were 12 cases where estimation was missing from patients admission form.



- Percentage wise distribution of all negative variation cases shows presence of 29 cases where negative variation is more than 10% of estimated amount and this is one of the concerned area for organization.

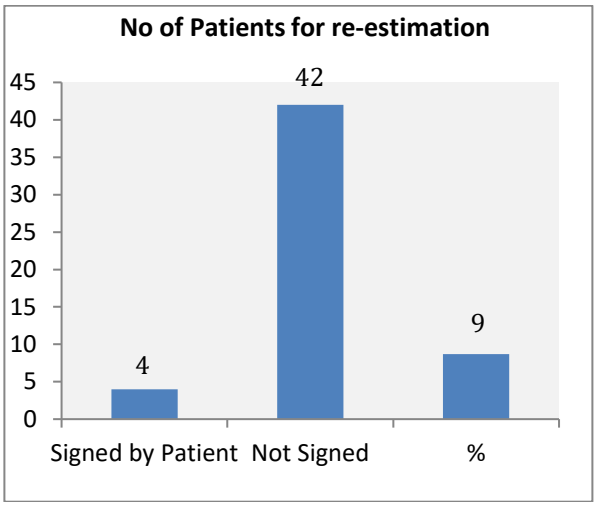
Performance of Quality indicators of Soni Manipal Hospital for the month of April

1. Percentage of admission those are aware of billing policies,financial consent was taken, documented and signed by patient for initial estimation. during the audit.



No of patients	242
Aware,signed	230
Not aware & not signed	12
% wise performance	95%

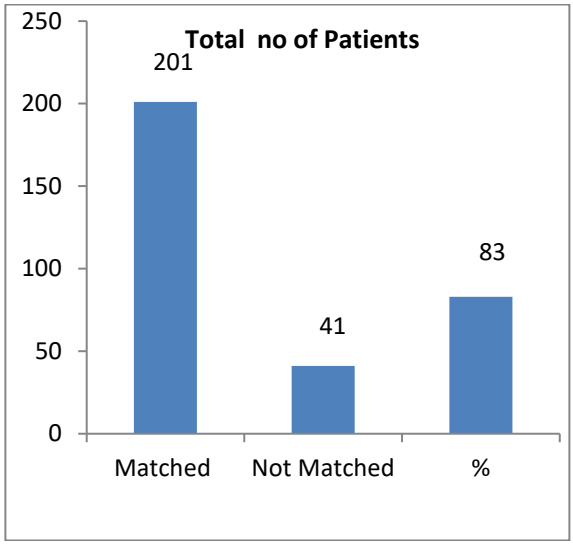
- Percentage of cases where re-estimation given, financial consent was taken, documented and signed by patient for Re-estimation.



No of patients re-estimation required	42
Re-estimation given & signed	4
No re-estimation given & not signed	38
% wise performance	9%

- Above picture shows poor performance regarding re-estimation where only 9 % of cases receive re-estimation counseling by financial desk this clearly shows vast improvement is required in complete estimation process.

3.Percentage of times estimated bill match the actual bill(+10% of the initial estimation).



No of patients	242
Matches with estimation	201
Not matched with estimation	41
% wise performance	83%

Reasons

- Incomplete coverage of patients for estimation and re-estimation by financial desk (Negligence).
- Lack of knowledge and Training of WIPRO HIS Software by Admission Staff for accurate tracking and monitoring of bill estimation process.
- Lack of Communication between Financial Desk and patient's attendant.

Training Intervention Programme

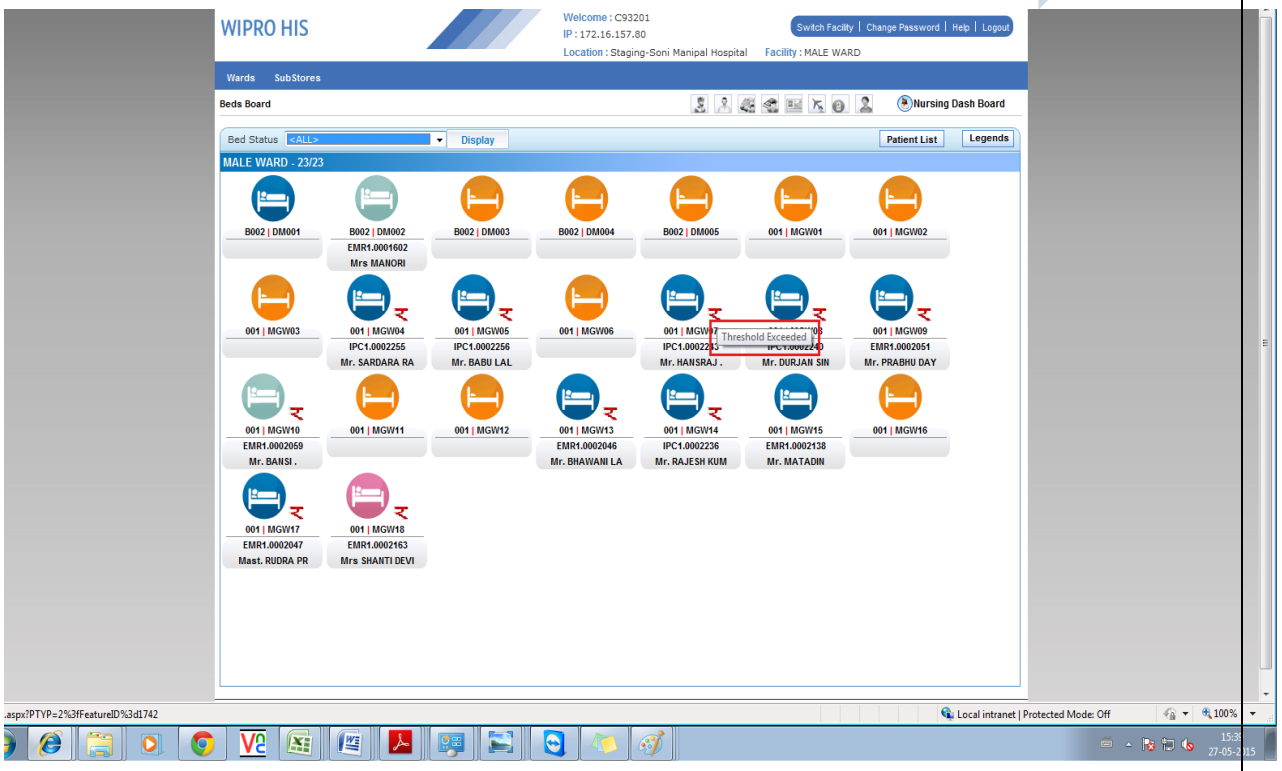
- Poor performance of Bill estimation was discussed in monthly Quality Committee meeting and various methods was discussed to improve efficiency of process.
- Meeting was arranged with IT department to know more about tracking of bill estimation by WIPRO HIS and what are the modifications we can implement to improve performance and than later on we reach to the conclusion that there is way by which we can track this process more efficiently.
- There is a requirement of Training programme for Financial desk regarding how to use WIPRO HIS for proper monitoring and tracking of estimation process.
- Training schedule was planned for financial desk and they were trained to use software for better performance.

WIPRO HIS Estimation Monitoring Process

Tracking of patients in nursing dash board of all wards on daily basis by financial desk.

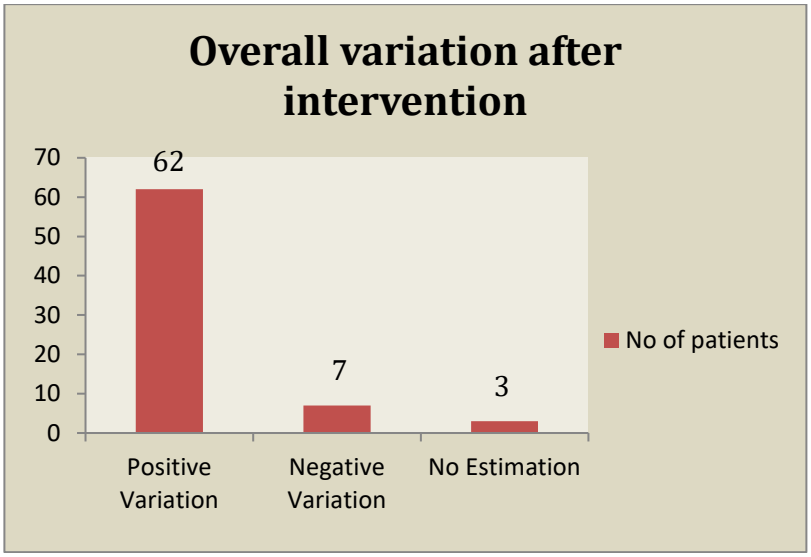
Appearance of Rupee Logo on patients bed when their bill amount crosses 80% of estimated amount (Threshold Exceeded)

Recounselling and re – estimation given to Threshold exceeded patients on daily basis.

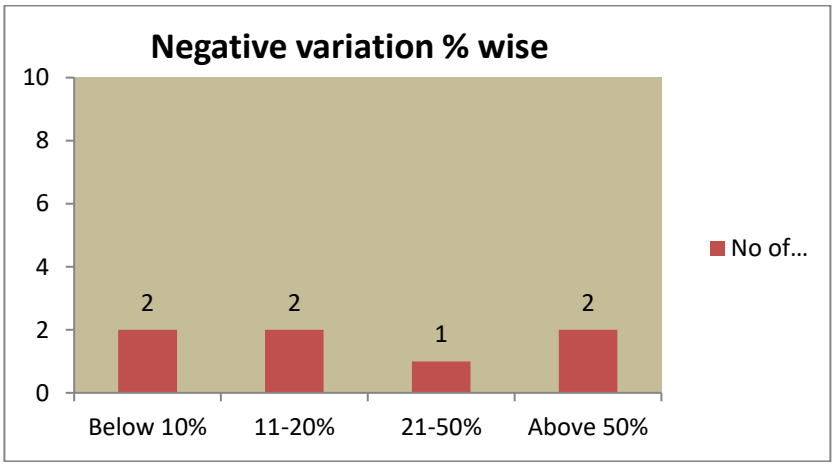


- Financial desk was trained to track all the patients by above process on daily basis and estimated amount can be track on patients admission sheet in WIPRO HIS.
- Pilot study is been conducted for one week to monitor the performance and results are discussed below:

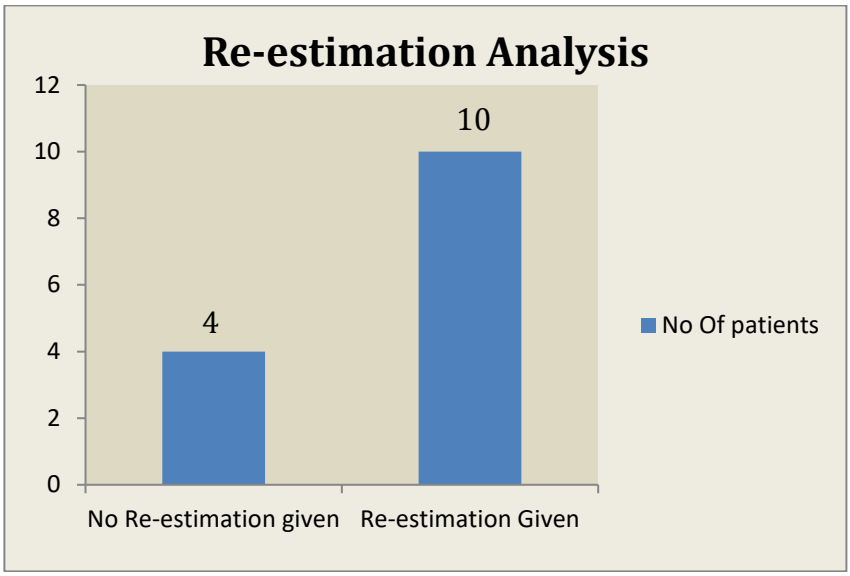
Post Intervention Analysis



- Over all variation of 72 cases shows positive variation for 62 cases (86 % coverage) and only 3 cases where estimation was not given which is far better performance as compare to previous month performance.



- There were only 7 cases with negative variation (Out of these 2 cases variation was below 10%) So as per the policy there were only 5 cases with negative variation which shows visible improvement from the previous month performance.



- Re-estimation process after intervention also shows visible improvement where out of 14 cases more than 70 % cases receive re-estimation and their re-estimation amount kept the final bill in positive variation which is a good performance indicator.

Conclusion:

- Bill estimation process is been observed in Soni Manipal Hospital and tried to analyse quality indicator for the month of april. On the basis of study Try to find out reason for poor performance and various methods to improve process.
- After discussing with various departments on same issue IT Department developed a Training Intervention program on the basis of suggestion proposed by myself for financial desk by which they can understand WIPRO HIS and monitor estimation process more efficiently. A pilot study was conducted after training to monitor performance of financial desk and visible improvement was observed.

Recommendations:

- Introduction of bill estimation checklist in patients file for daily based review of bill.
- Periodic rate review of Treatment procedures & Packages for more accurate estimation of bill.
- Improve Communication between Patient's attendant and Financial Desk.

Bed Utilization in Dialysis Department of Manipal Hospital

Introduction :

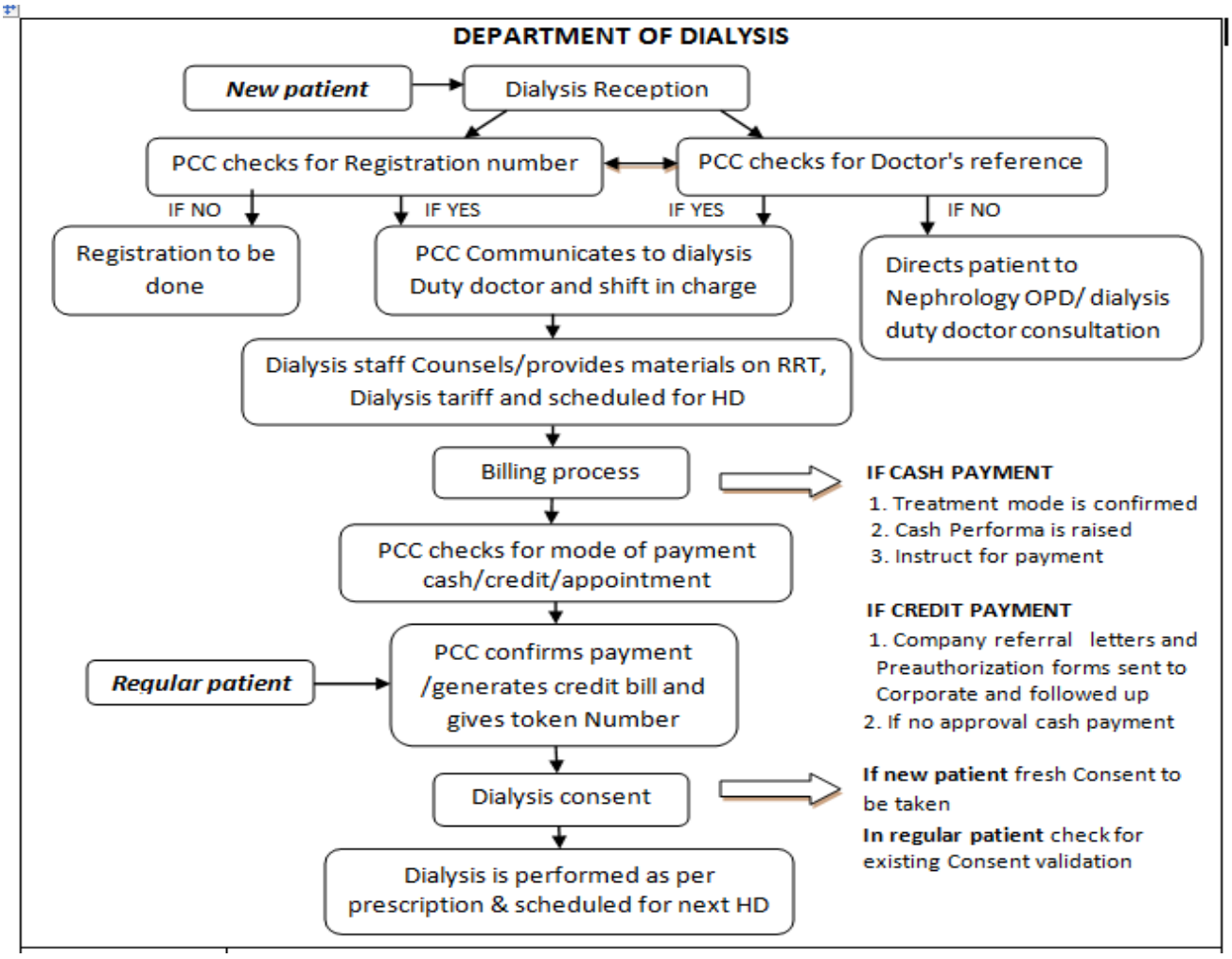
Dialysis unit was established 1 year ago and included under Nephrology Department.It is a fully functional unit with a Bed capacity of 10 Beds. 7 beds for normal Patients,1 for IPD Patients and 2 Isolation Beds. All machine are portable.

On an average 30 – 40 Dialysis procedures performed every day in unit which inclusive of out patient and in patient department.

The Procedure carried out at the unit are Hemodialysis(HD), Heamodiafilteration (HDF),Plasmaphresis(For ABO incompatible renal transplant). About 700 Dialysis are performed per month.

The staffing is as follows:

Nephrologist	3
Dislysis Therapist	6
Staff Nurse	4
General Duty Assistant (GDA)	1
Housekeeping	1



Objective:

- To Study Work Process of Dialysis Department in Soni Manipal Hospital, Jaipur.
- To Study Bed Utilization and reasons for the Delay in Dialysis Department and methods to improve efficiency of Dialysis Department.

Methodology:

- Study Area :- Dialysis Department,Soni Manipal Hospital
- Study Design :- Non Interventional Descriptive Study
- Sample Size :- 300 Dialysis patients
- Study Duration:- 15 Days
- Sampling Method:-Observational Method

Data Collection Tool

- Primary Data : Data collected on daily basis by time motion study and direct observation of all three shifts in dialysis department.
- Excel sheet is been maintained to gather all data with below headings:

UHID NO	Pt Name	Date	Start Time	End Time	Total Time	Cleaning time	Final Time	Starting time of dialysis	Time between dialysis over and next patient change

Data Analysis :

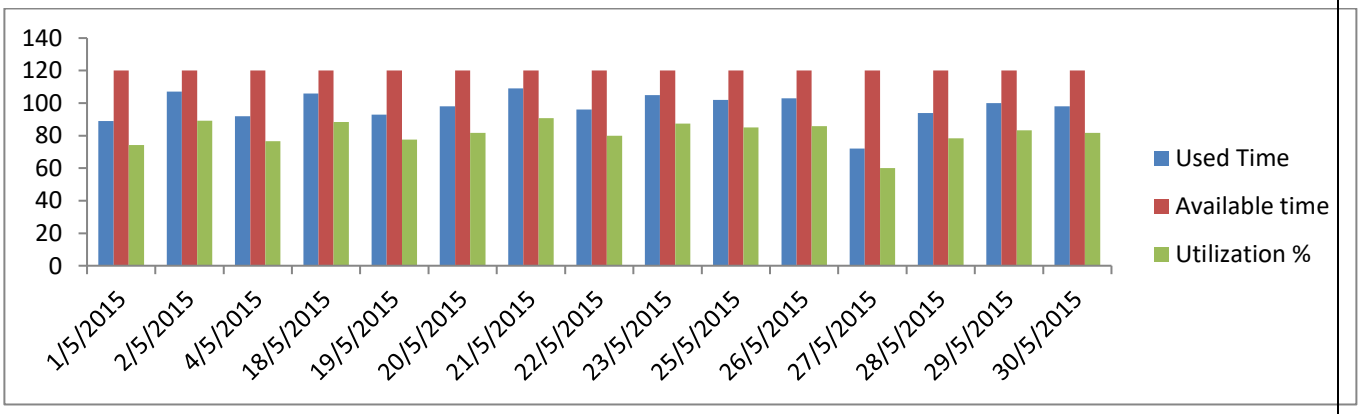
Total Used Hours = Dialysis Closing time – Dialysis Starting time+cleaning time.

Total Available time = no of beds(X) total no of hours(X) no of days.

Utilization = Total Used Hours * 100

Total Available time

Daily Utilization Performance

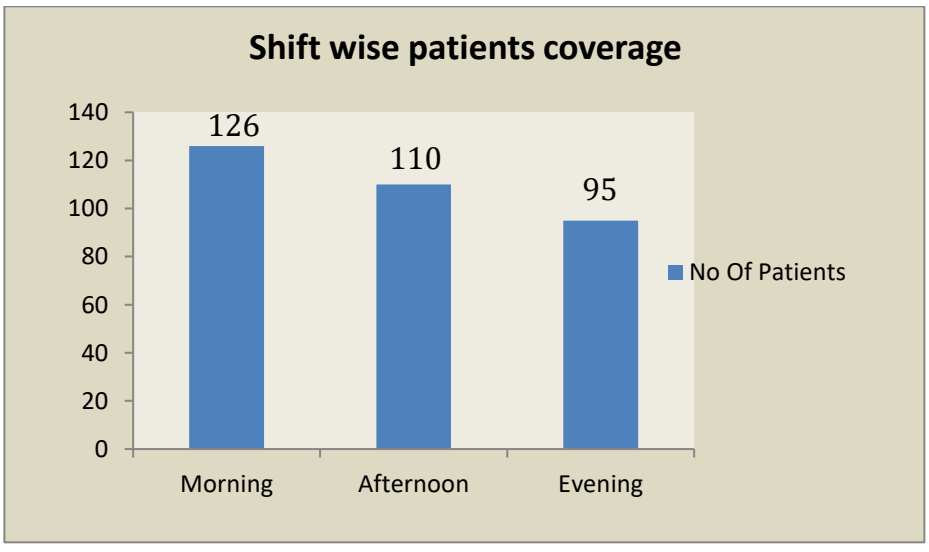


Date	Used Time	Available time	Utilization %
1/5/2015	89	120	74
2/5/2015	107	120	89
4/5/2015	92	120	77
18/5/2015	106	120	88
19/5/2015	93	120	78
20/5/2015	98	120	82
21/5/2015	109	120	91
22/5/2015	96	120	80
23/5/2015	105	120	88
25/5/2015	102	120	85
26/5/2015	103	120	86
27/5/2015	72	120	60
28/5/2015	94	120	78
29/5/2015	100	120	83
30/5/2015	98	120	82
15 Days	1464	1800	81.33

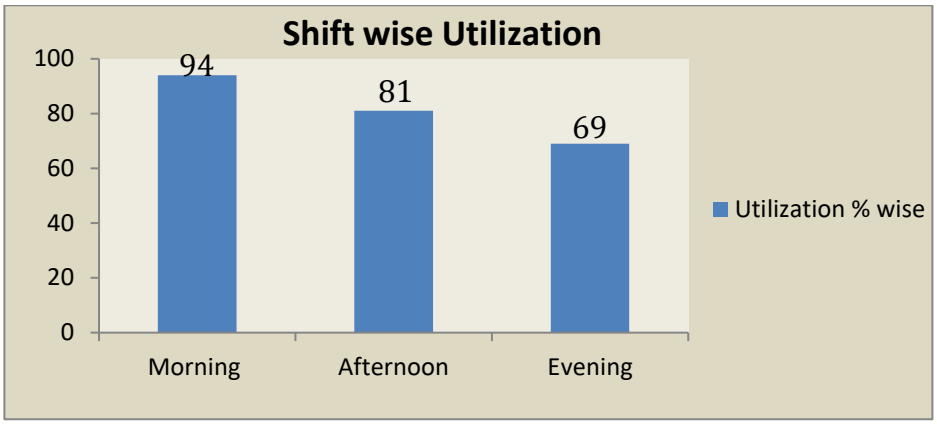
- Above Chart shows day wise Bed utilization of Dialysis department we can observe maximum it was 91% and minimum it was 60 % and overall bed utilization was 81 %.
- There are various reasons for overall performance of dialysis department for further analysis we tried to analyse utilization shift wise to estimate performance in various shift.

• Shift wise Utilization :

- We tried to calculate utilization shift wise and found variation in no of patient covered for dialysis and utilization in different shift which are shown below:



- Visible declined in no of patient covered for dialysis from morning to evening shift.

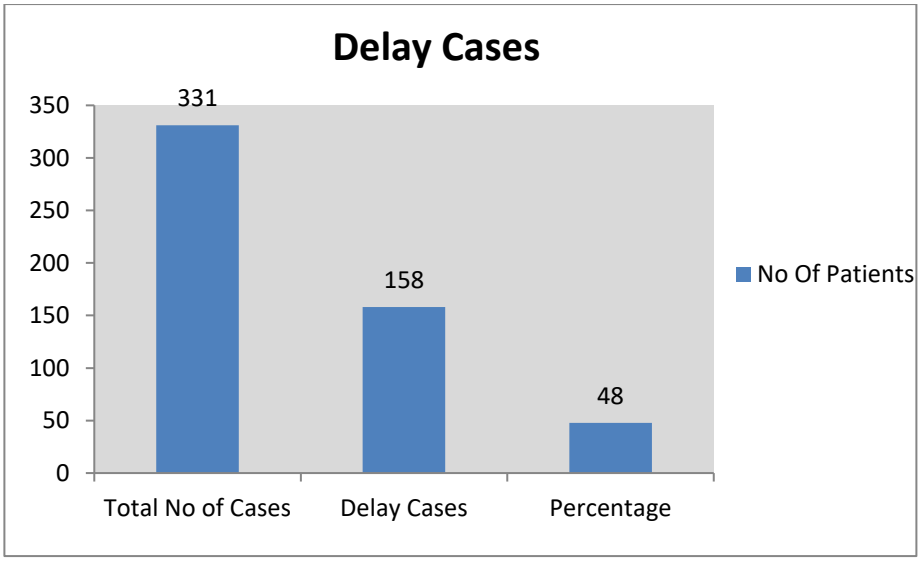


- Overall utilization also shows declined from morning to evening session.

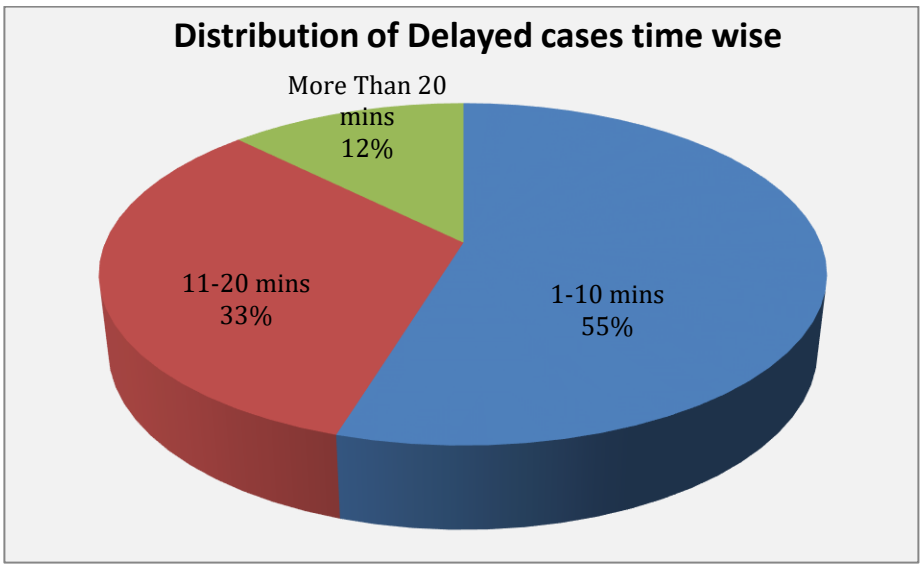
Delay in Dialysis process:

- Ideally dialysis process is of 4 hours it may vary according to doctors advise and 20 mins are given to staff for bedsheet change,instrument change and starting of new dialysis for next patient. So normally change in shift should take place in 4:20 mins.

- If its exceeding we are considering those cases as delayed cases and we tried to find out various reasons for the delay which are discussed below:



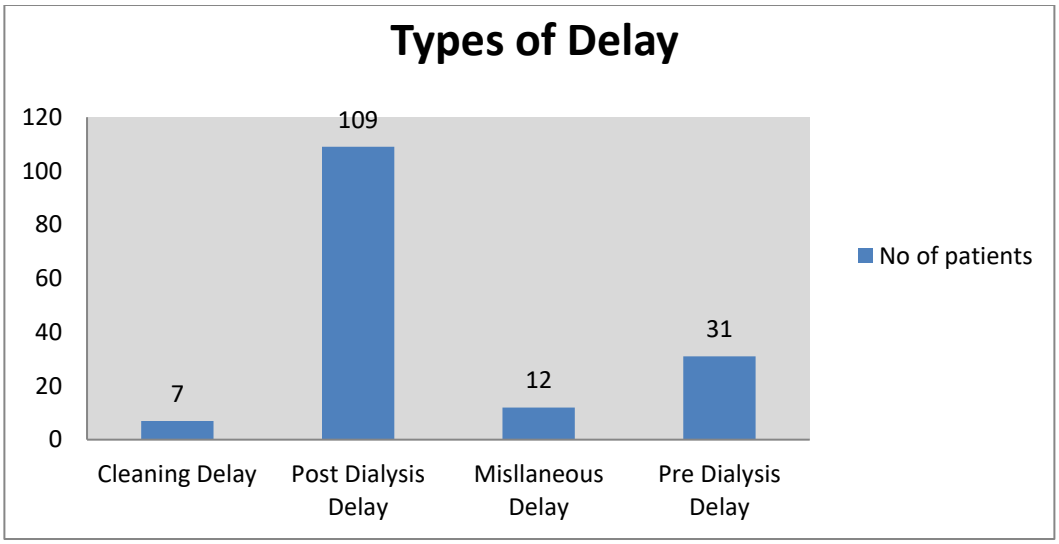
- Above Graph shows 48 % of all covered patients are delayed cases where time exceeded from normal allotted time which is 4:20 mins.

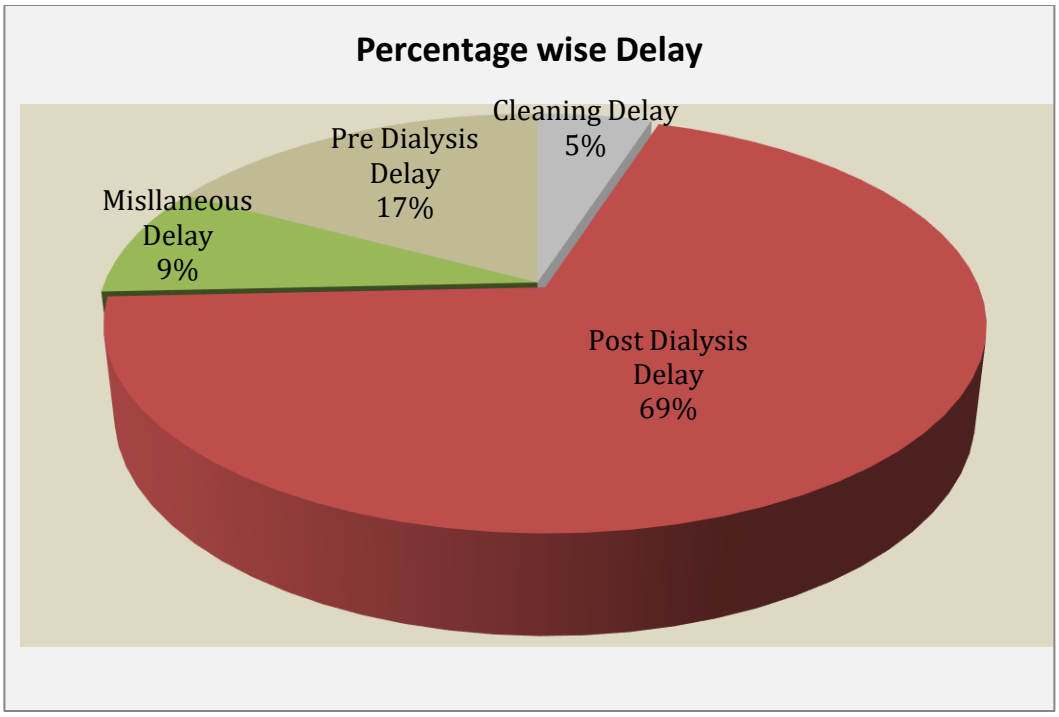


- Time wise analysis shows that 55 % cases show upto 10 mins delay and 33% cases upto 20 mins delay and there were 12 % cases where delay was above 20 mins.

Reasons for Delay:

- **Pre Dialysis Delay :** Delay in starting of Dialysis
- **Post Dialysis Delay** :Delay after completion of Dialysis
- **Cleaning Delay**: Delay in change in bedsheet and instrument change.
- **Misllaneous Delay** :Delay due to sudden bleeding/ difficulty in detection of veins or artery/administration of any drugs or minor procedures.

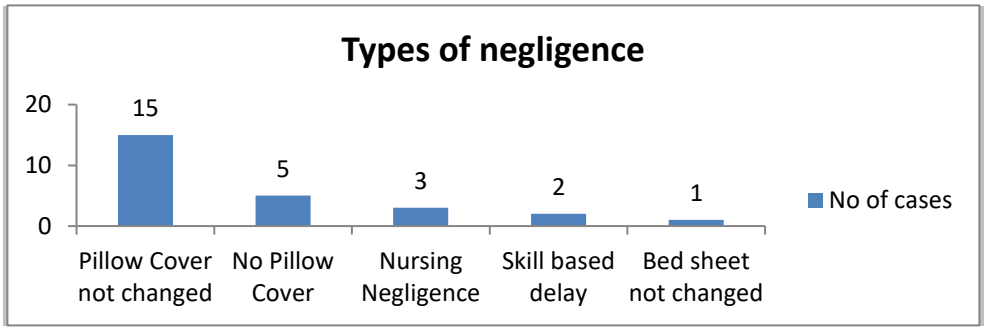


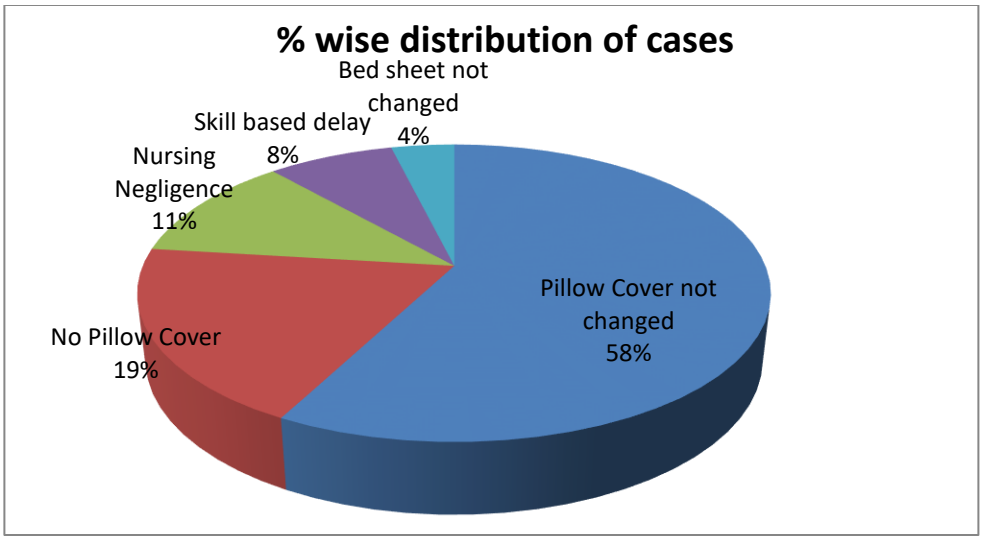


- Overall analysis of all delayed patients shows that 69 % of all delayed cases are post dialysis delay and 17 % are predialysis delay followed by misllaneous 9% , cleaning delay 5% respectively.
- Majority of delay are associated with pre and post dialysis delay and major reason behind these delay is old age patients as most of the patients are above 60 yrs and they are physically very week and they are undergoing dialysis from past so many years.
- So it is a difficult task for dialysis therapist and nurses to start and close the process at right time due to various misllaneous reasons like more time needed after completion of dialysis as they feel giddiness and you cannot force them to vacate the bed at given time, Sometimes they are waiting for their attendants as they are so old they cannot leave at their own.

Housekeeping Negligence:

In our study we found various housekeeping negligence during shift change which as follows:





- More than 50% of negligence was associated with pillow cover was not changed for next shift patients and followed by 18 % cases where pillow cover was missing for patients.

Recommendations:

- Dialysis and new set of instruments for respective next shift patients should be kept ready and consumables should be placed on table in front of beds for quick administration.
- Introduction of more beds and dialysis machine for normal patient as patient load is more on normal beds as compare to isolation beds
- Staff should work in coordination to speed up the process during change in shift.Eg :one staff should proceed for post dialysis change and other staff can arrange dialysis machine and consumables for next patient this will definitely take less time as compare to one staff doing everything.
- During shift change old age patients should be considered first as their pre and post dialysis time is long.
- Housekeeping should be improved to prevent cross infection.