

SUMMER TRAINING PROJECT REPORT

By Dr.Diksha Sharma(0272)



INTRODUCTION

Bed Management is a core activity in all hospitals..Few institutions have complete visibility of this process as it weaves its way through the organization and fewer still have a means of measuring the performance of the activity that results in the availability of the bed.

Automated support can help in efficient bed management . A software would be able to provide a much better solution to the bed management problems. The software would not only be able to help in daily activities (Admission, Discharge , Housekeeping etc) , it would also provide insights into the different processes via the HIS analytics and management dashboards.

Study on gaps in admission and discharge process to leverage technology in efficient bed management.

Objectives

To assess the gaps in admission and discharge process

To propose solutions for efficient bed management.

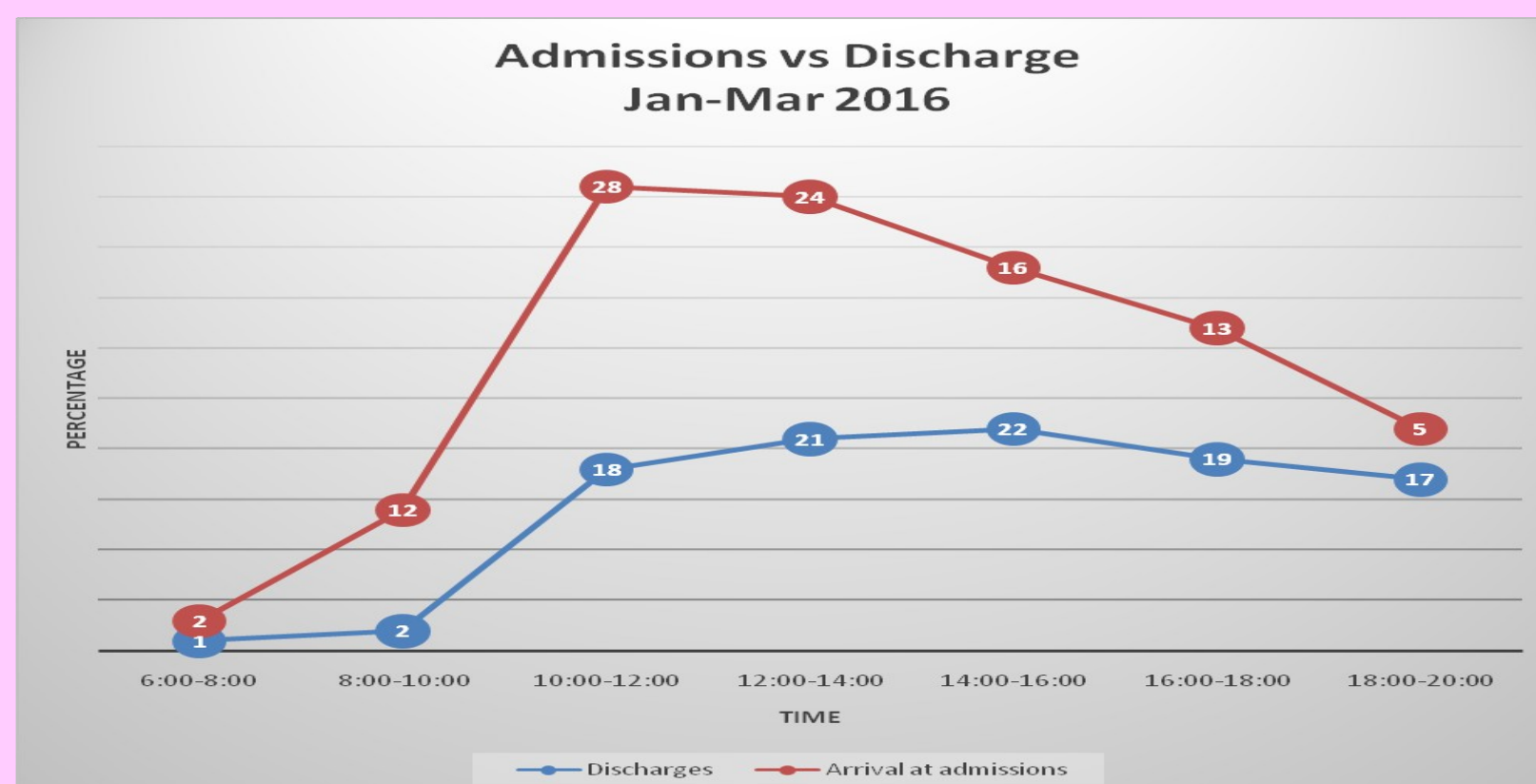
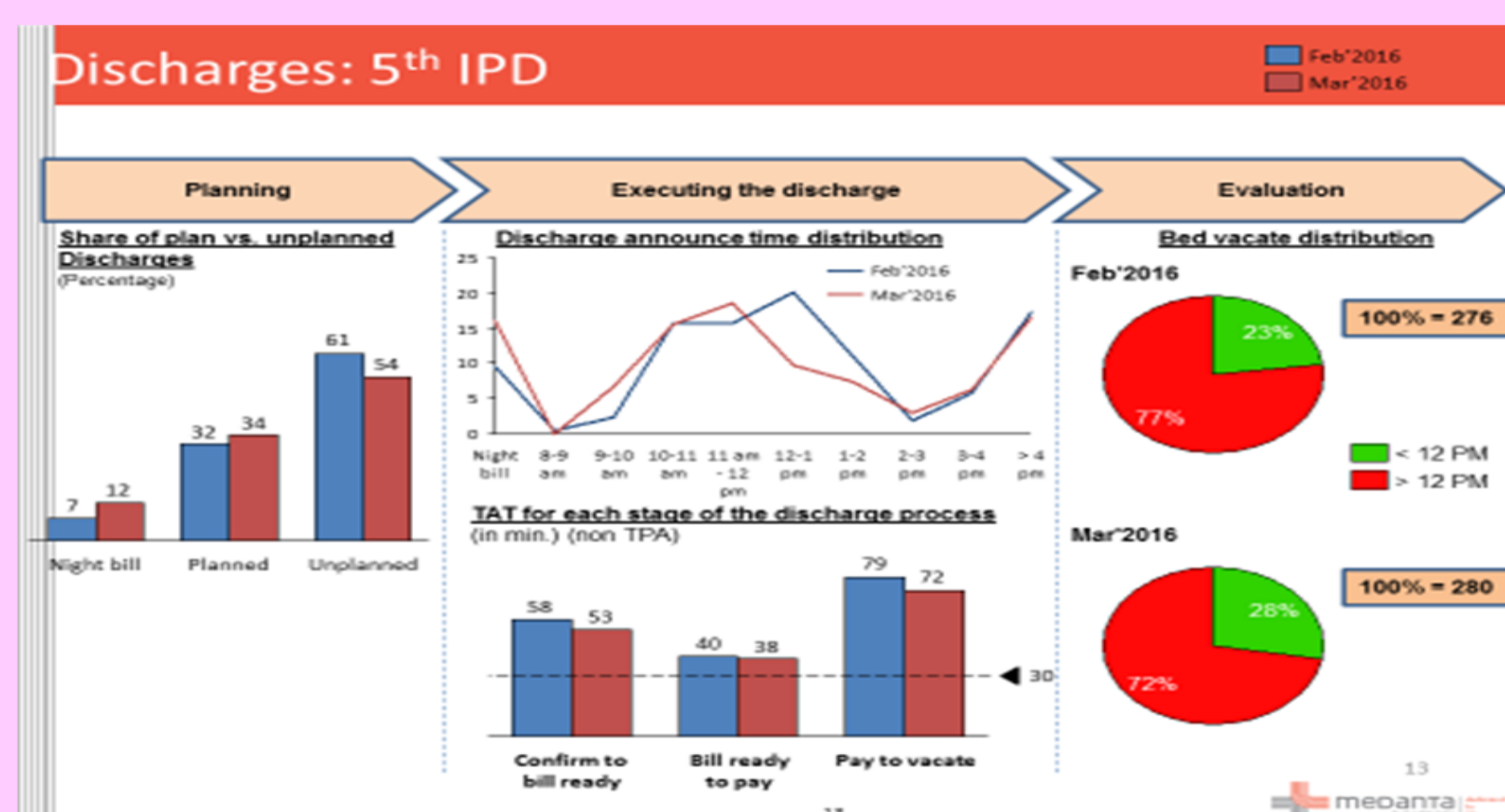
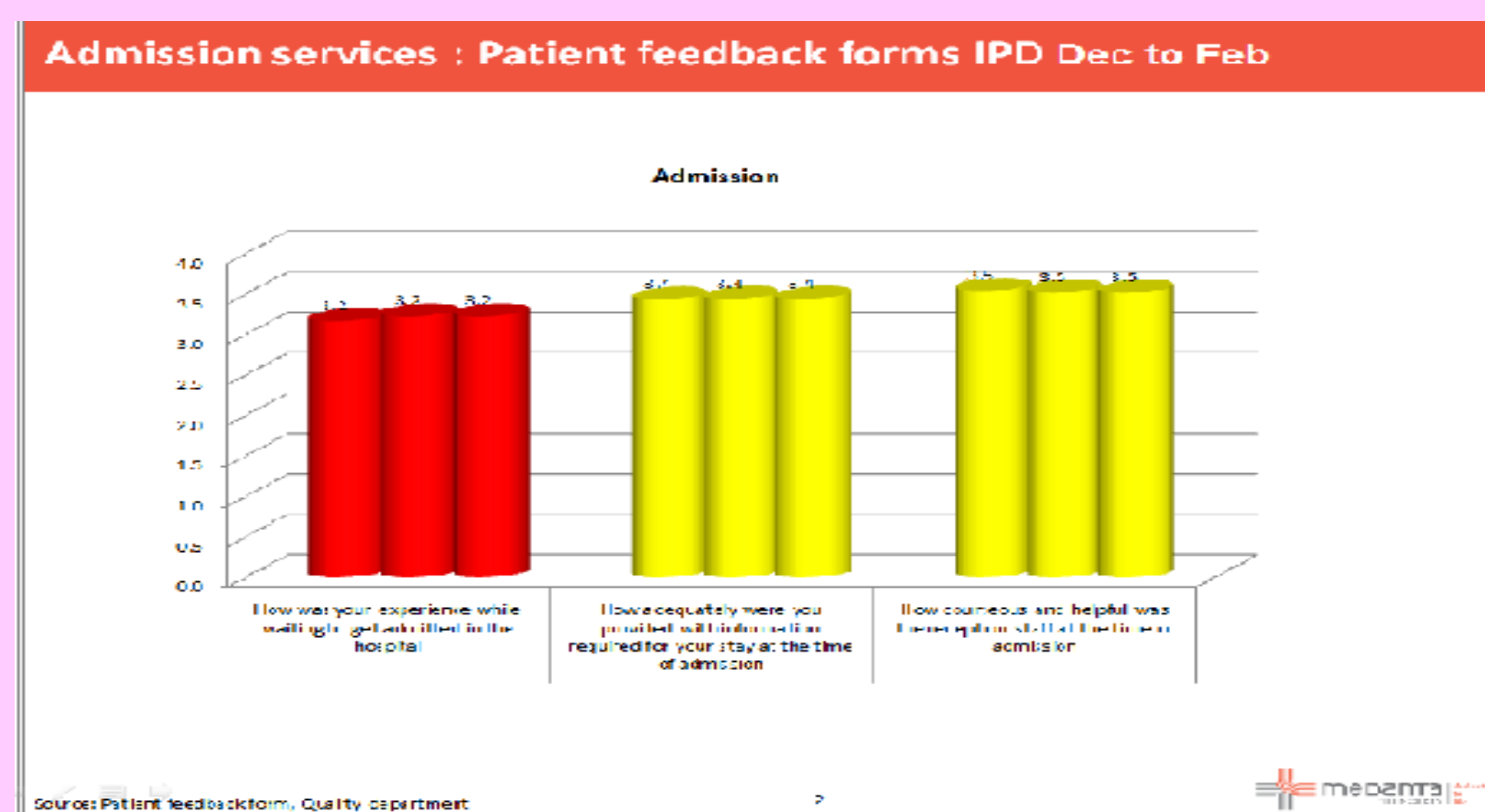
Methodology

Study Design : Cross-sectional study.

Study respondents: IPD patients

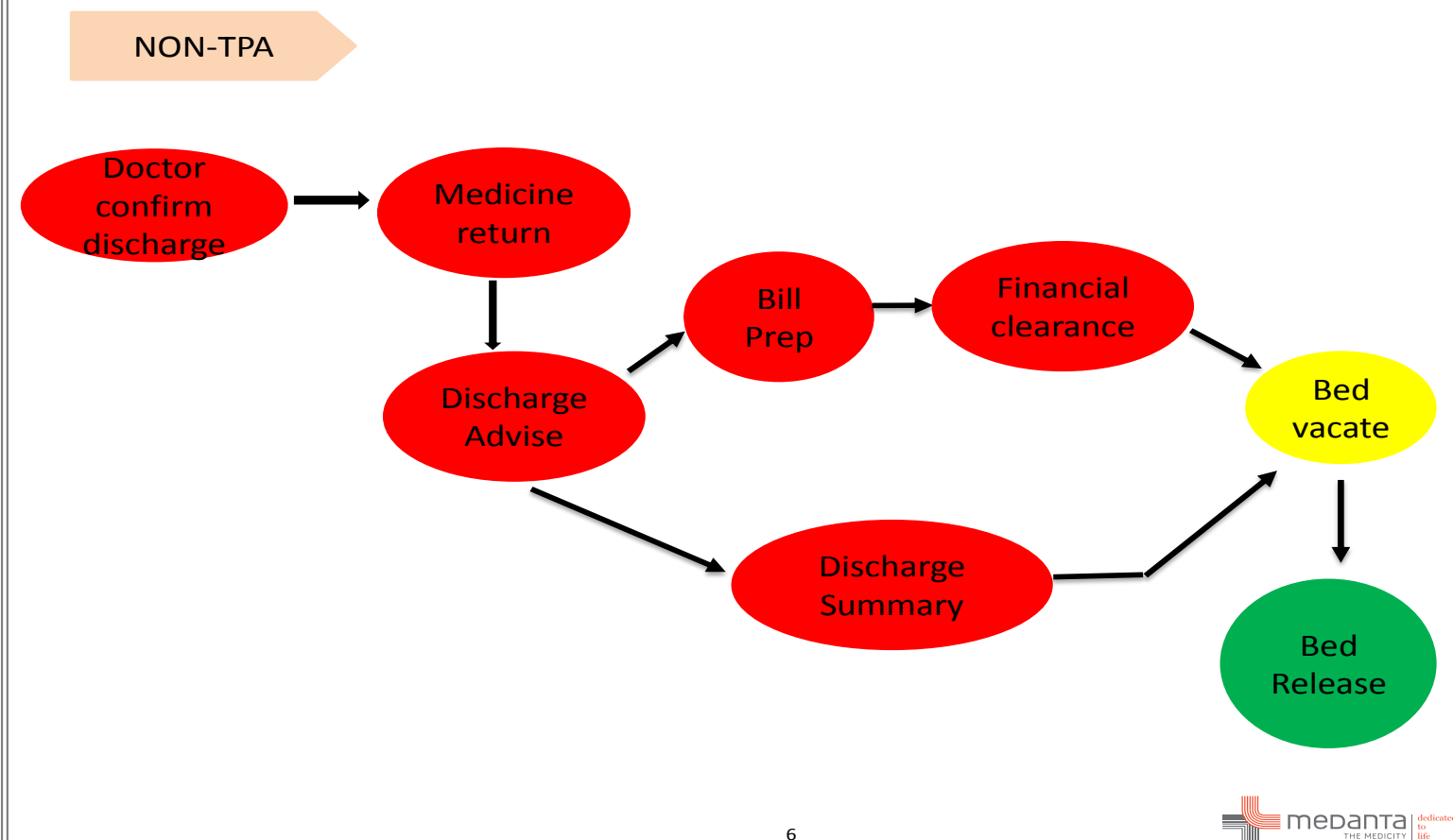
Data collection Tool: HIS

GAP ANALYSIS ADMISSION vs DISCHARGE



Problem	Root cause
•Admission/ Discharges	Greater percentage of post 12 pm discharges delays bed availability in peak admission hours. Delayed bed availability leads to bed allotment at different floors increasing the number of transfers. Increased number of transfers delays patient treatment , posing risk to the patient. It also increases workload of nursing staff.
•Process flow gaps	Even after bed allocation by Bed manager , front office calls to confirm if bed is ready, if delay in picking or bed not ready, patient waiting time increases.
•No one person responsible	Too many hands on the process result in multiple phone calls and lack of accountability. Process is fragmented.
•Bottle neck in Discharges	Financial clearance to bed vacate is taking 45% of discharge time.

Process flow of Discharge



Proposals to improve patient flow in hospital :

- Planned admissions, planned OT +ICU and planned ICU transfers information to be received a day prior with admissions
- An Escalation System for all levels of discharge and admission process
- Dashboards at Billing Office, Nursing units, and Admission office reflecting escalations
- Development of a Pull system rather than a Push System wherein the discharge process is smooth enough so patients are pulled to beds and not pushed from Admissions
- Improved communication and standardisation of processes .

MANAGEMENT DASHBOARDS

Dashboard at Billing

18/5/2016
5:15 pm

Yellow : warning
Red : critical

Bill Preparation			Financial Clearance		
Bed #	At	Time to next escalation	Bed #	At	Time to next escalation
3547	L3	5 mins	2567	L3	7 mins
3678	L2	10 mins	3678	L2	10 mins
6789	L1	15 mins	6789	L1	15 mins
2345	L1	25 mins	2345	L1	20 mins

Dashboard at Nursing Unit

18/5/2016
5:15 pm

Yellow: Warning
Red: Critical

15 A Wing

Discharge Summary			Financial Clearance			Bed Vacate		
Bed No.	At	Next Escalation in	Bed No.	At	Next Escalation in	Bed No.	At	Next Escalation in
3547	L3	5 mins	3234	L3	3 mins	1234	L3	4 mins
3678	L2	10 mins	3678	L2	10 mins	2345	L2	5 mins
4567	L1	15 mins	4567	L1	10 mins	4567	L1	6 mins

Dashboard at Admissions

18/5/2016
5:15 pm

Yellow : warning
Red : critical

Bed Allotment			Marked arrival in Bed		
Patient id	At	Time to next escalation	Patient id	At	Time to next escalation
4567	L2	5 mins	4567	L2	7 mins
3678	L2	10 mins	3678	L2	10 mins
6789	L1	15 mins	6789	L1	15 mins
2345	L1	25 mins	2345	L1	20 mins

Escalation Process for efficient Admissions:

The Escalation Process proposed for efficient discharges has been divided with increasing level of critical action needed as under:
L1, L2, L3, L4, L5

Bed Allotment						Marked Arrival in Bed					
	L1	L2	L3	L4	L5		L1	L2	L3	L4	L5
Time (post BFA confirmation)	+30 mins	+45 mins	+60 mins	+90 mins	+120 mins	Time (post bed allotment)	+30 mins	+45 mins	+60 mins	+90 mins	+120 mins
Who	Manager	Admission	GM-PCS	HOD	COO	Who	Manager	Admissions	GM-PCS	Institute Manager	COO
How	Dashboard at admissions		Message	Message		How	Dashboard at admissions		MESSAGE		
What	Bed # turns		Bed # 4156: Bed Allotment pending at L3, next escalation in 6 minutes			What	Bed # turns		Bed # 4156: mark arrival in bed pending at L5		

- Standardisation of process and assigned accountability .
- Consistent application of decision criteria .
- Patients reaching appropriate floors faster for specialised treatment .
- Achieve planned discharges to 60% from current average of 30 %
- Create an efficient discharge process to enable 70% cash discharges leave by 11 am – 12 pm
- Less transfers will increase patient stability and satisfaction .
- Fewer transfers between rooms will decrease time nurses spend documenting the move and updating the patient statuses .

Escalation Process for efficient Discharges:

The Escalation Process proposed for efficient discharges has been divided with increasing level of critical action needed as under:
L1, L2, L3, L4, L5

Bill preparation Night Billing						Bill preparation Planned Discharges					
	L1	L2	L3	L4			L1	L2	L3	L4	
TIME	8:30 am	9:00 am	9:15 am	9:30 am	TIME (POST DISCHARGE ADVISE)	+30 mins	+45 mins	+60 mins	+90 mins	+120 mins	
WHO	Billing Manager		HOD Billing	COO	WHO		Billing Manager		HOD Billing	COO	
HOW	Dashboard Billing Office		Message		HOW	Dashboard at Billing Office		MESSAGE			
WHAT	Bed # turns		Bed # 4156: Bill pending at L3, next escalation in 7 minutes		WHAT	Bed # turns		Bed # 4156: Bill pending at L3, next escalation in 12 minutes			

Financial Clearance Night Billing (Bill prepared)						Discharge Summary Night Billing Cases					
	L1	L2	L3	L4	L5		L1	L2	L3	L4	L5
TIME	8:30 AM	9:00 AM	9:15 AM	9:30 AM	10:00 AM	Time	7:30 AM	7:30 AM	8:00 AM	9:00 AM	10:30 AM
WHO	Nursing TL		Institute Manager	COO		Who		Nursing TL	Doctor on call	Institute Manager	COO
HOW	Dashboard at Billing Office		MESSAGE			How	Dashboard at Nursing Unit		MESSAGE		
WHAT	Bed # turns		Bed # 4156: Financial Clearance Pending at L4, next escalation in 6 minutes			What	Bed # starts appearing :		Bed # 4156: Discharge summary is pending at L4, next escalation in 5 minutes .		

Discharge Summary Planned Discharges						Bed Vacate					
	L1	L2	L3	L4	L5		L1	L2	L3	L4	L5
TIME (post discharge advise)	+30 mins	+45 mins	+60 mins	+90 mins	+120 mins	Time (post Financial Clearance)	+30 mins	+45 mins	+60 mins	+90 mins	+120 mins
WHO	Nursing TL/ Floor Manager		Doctor on call	HOD	COO	Who	Floor Manager	Head Nurse	Institute Manager	COO	
HOW	Dashboard at Billing unit		MESSAGE			What	Dashboard Nursing Station		Message	Message	
WHAT	Bed # turns		Bed # 4156: Discharge Summary not ready at L3, next escalation in 5 minutes			How	Bed # turns		Bed # 4156: Bed vacate pending at L3, next escalation in 10 minutes		

Financial Clearance Planned Discharges					
	L1	L2	L3	L4	L5
Time (post Billing)	+30 mins	+45 mins	+60 mins	+90 mins	+120 mins
Who	Floor Manager		Institute Manager	COO	
How	Dashboard at billing office		MESSAGE		
What	Bed # turns		Bed # 4156: financial clearance pending at L3, next escalation in 7 minutes		

SUMMER TRAINING PROJECT REPORT

FMS AUDIT By Dr.Diksha Sharma(0272)



OBSERVATIONAL LEARNING AT MEDANTA

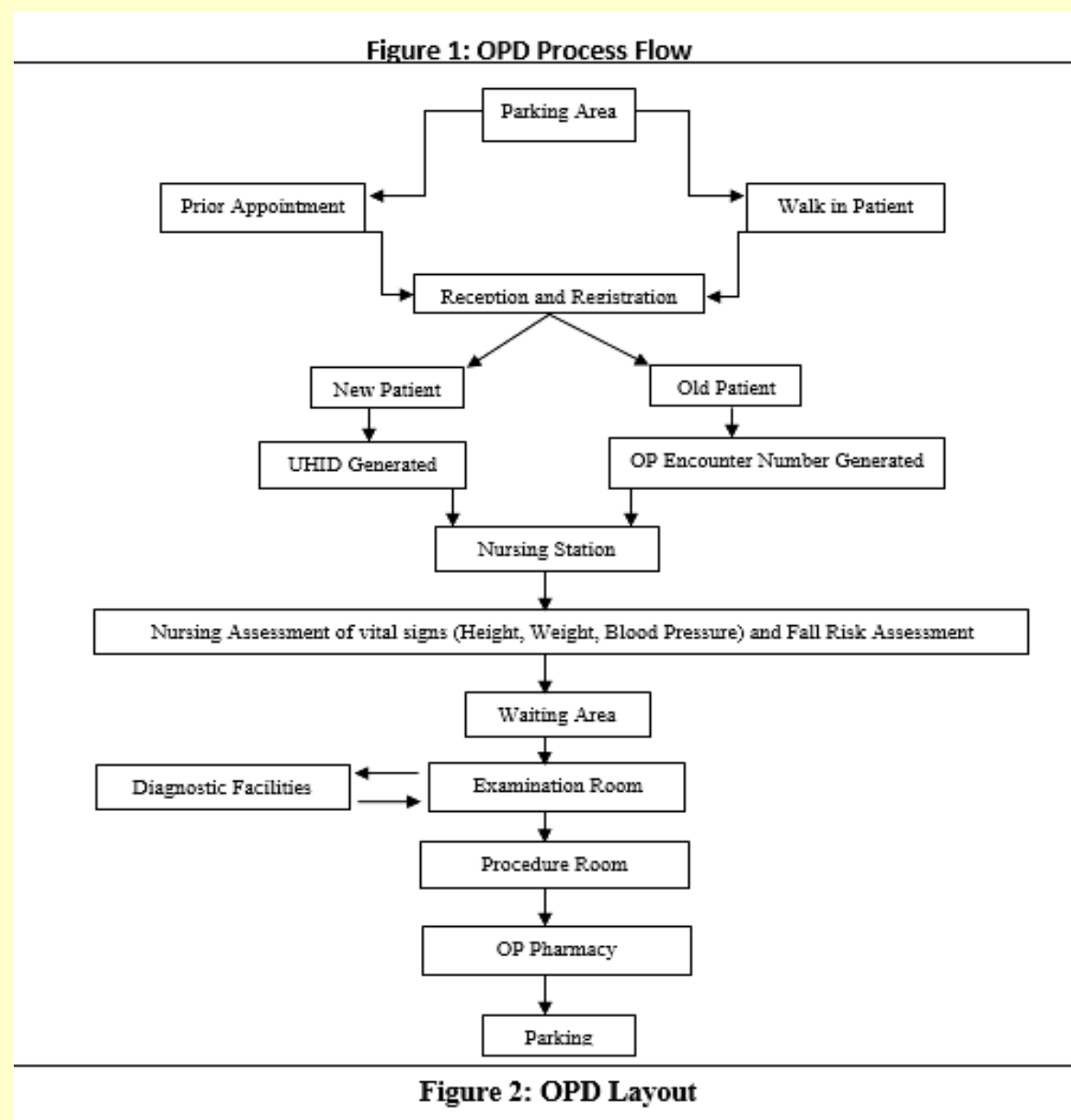
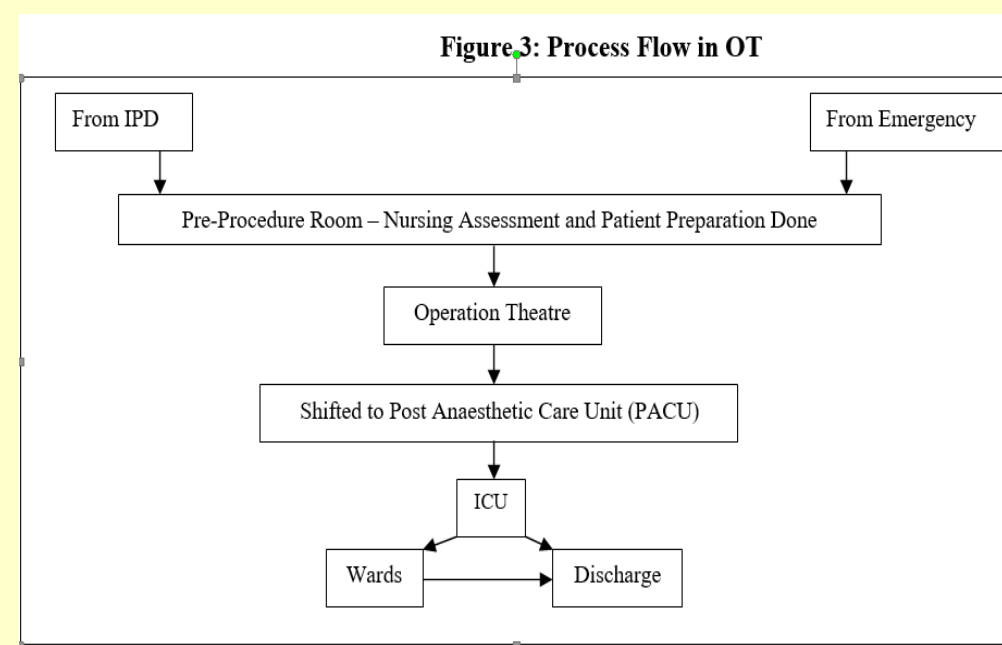
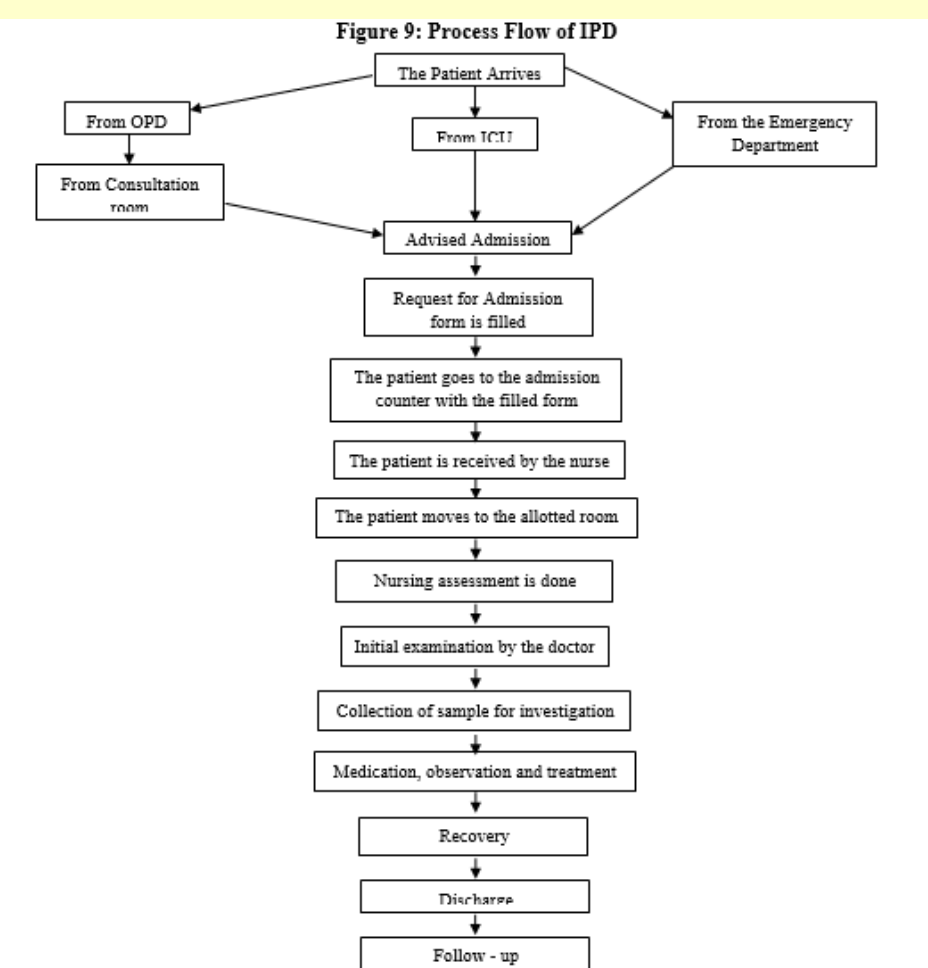


Figure 2: OPD Layout



COLOR	INDICATION
White Band	Inpatient
Red Band	Allergy
Yellow Band	Diabetes/Kidney disease No I/V prick No measurement of BP
Blue Band	Vulnerable/High Risk patients

Sr. No	Parameters	Details
1.	Number of Ambulances	8
2.	Types of Ambulances	Basic life support Advanced life support Air Ambulances
3.	Air Ambulance	Non Scheduled passenger air ambulance 40-50 patients are brought in by through this method every month
4.	Air Ambulance Staff	Anesthetist Cardiologist Emergency medical officer Nurse



INTRODUCTION

A FACILITY AUDIT is a comprehensive review of a facility's assets. They are a standard method for establishing baseline information about the components, policies, and procedures of a new or existing facility.

An audit is a way of determining the "status" of the facility at a given time-that is, it provides a snapshot of how the various systems and components are operating.

FACILITY AUDITS are important because they:

Help planners, managers, and staff know what they have, its condition, service history, maintenance needs, and location.

Establish a baseline for measuring facilities

RESEARCH METHODOLOGY

Type of study : Observational descriptive Study

Data collection : Direct observation and questions from staff

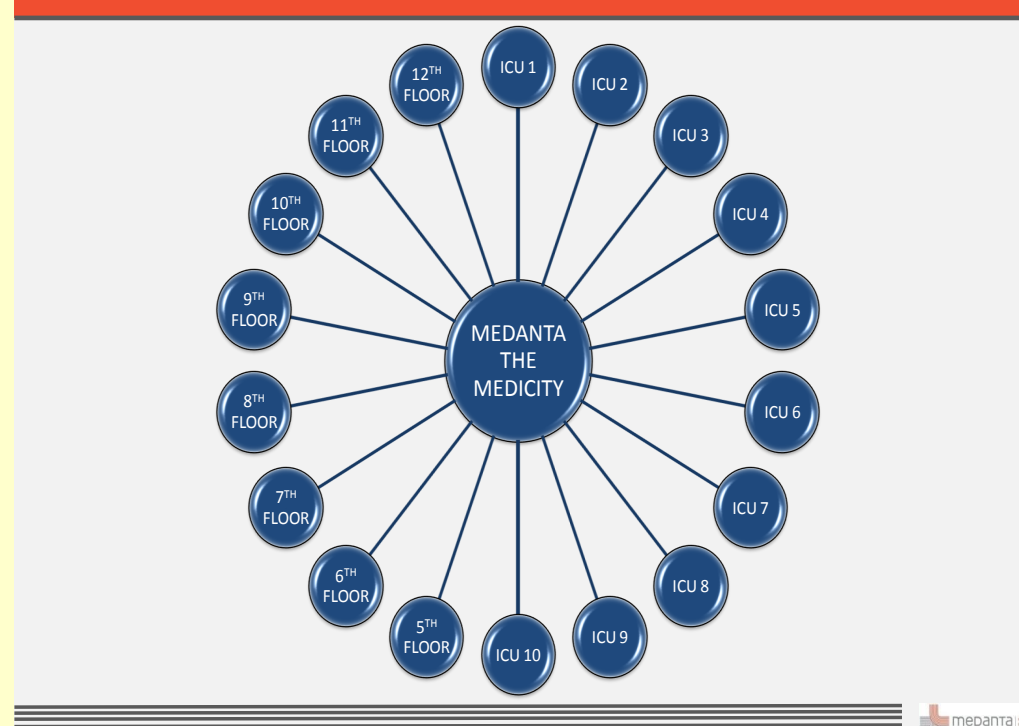
Duration : April 2016

Facility Management Audits for Medanta Hospital in April 2016

Parameters

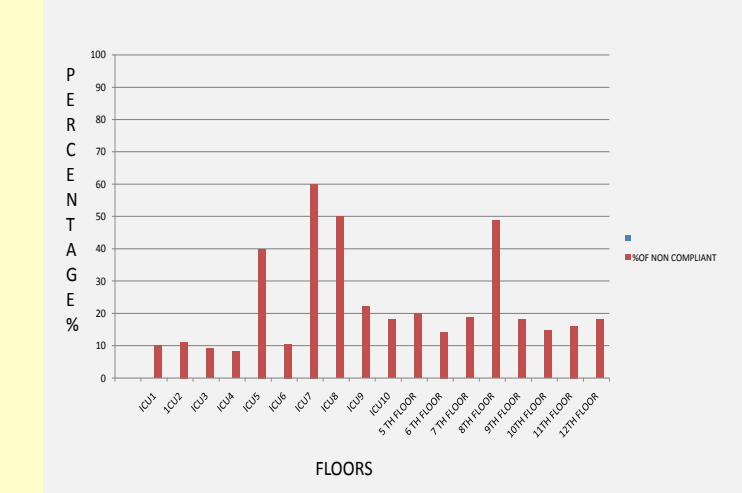
- Fire Safety
- Hospital Safety
- Hazmat
- Biomedical Equipment
- Engineering

The areas covered are as under:



HAZMAT

AREA-WISE PERCENTAGE OF NON COMPLIANCE IN HAZMAT

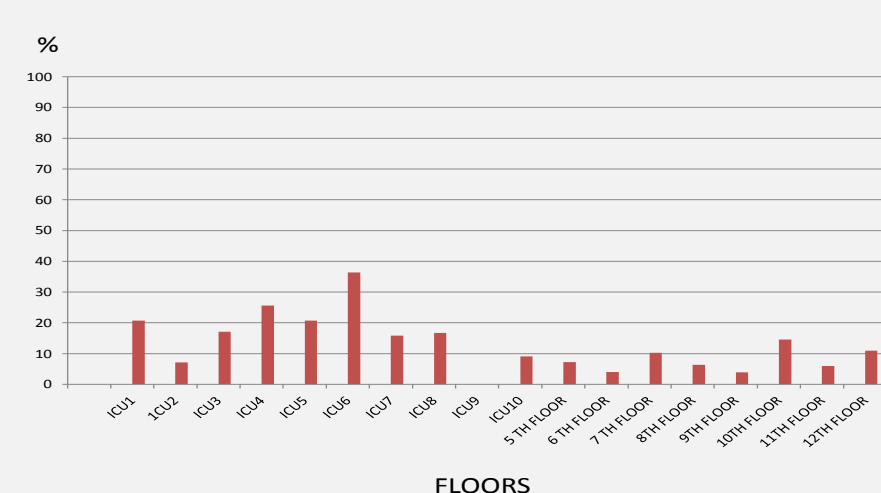


The HAZMAT was assessed under the following categories:

Category	Parameters
Storage	HAZMAT Chemical are stored have a label "For HAZMAT only" Opened primary containers have a label containing date of opening and date of expiry (check any 3) Secondary container is labelled with 'For HAZMAT use only' with a yellow colored hazmat label MSDS is available with the department for all chemicals present there HAZMAT spill kit is available on the location and content list is pasted Contents in the kit match the list How to manage a major spill?
Staff Knowledge	

HOSPITAL SAFETY

AREA-WISE PERCENTAGE OF NON COMPLIANCE IN HOSPITAL SAFETY

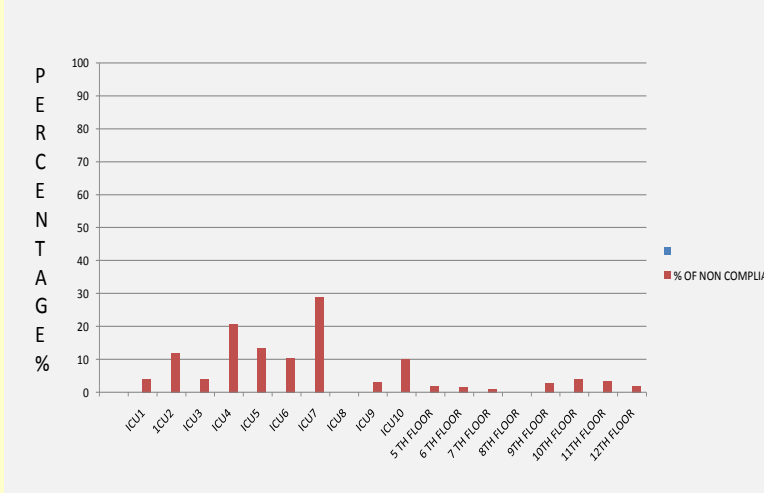


The HOSPITAL SAFETY was assessed under the following categories:

CATEGORY	PARAMETERS
Access safety	Security guard deployed at the entry of all patient care area
Room safety	Patient medication drawers are locked and locks are functional (Check any 3)
Employee ID	Each person in the IP area is identifiable by an ID card/ attendant pass/ visitor pass/ other
Nursing station	Patient file are secured
Staff knowledge (Security Guard)	All Keys are available with guard and are in working condition.
Corridors	No food trays in corridors

FIRE SAFETY

AREA-WISE PERCENTAGE OF NON COMPLIANCE IN FIRE SAFETY



Parameters

Staff Knowledge

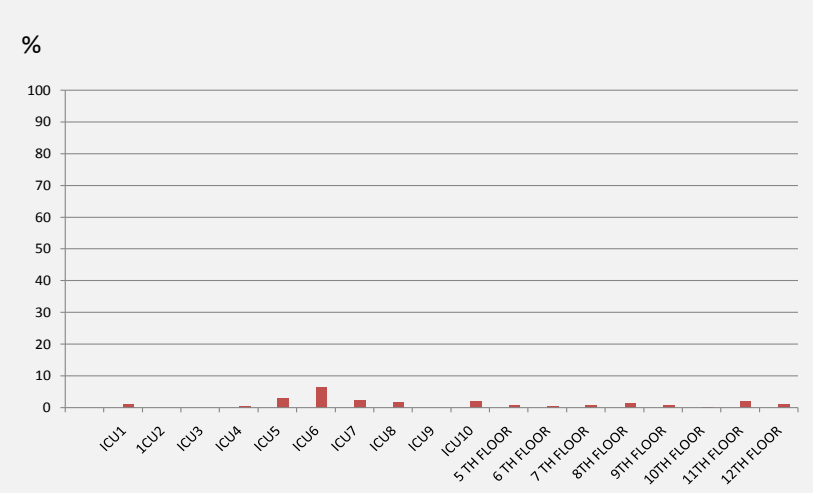
Fire Hose

Fire Extinguisher

AVSU

BIOMEDICAL EQUIPMENT

AREA-WISE PERCENTAGE OF NON COMPLIANCE IN BIOMEDICAL EQUIPMENT

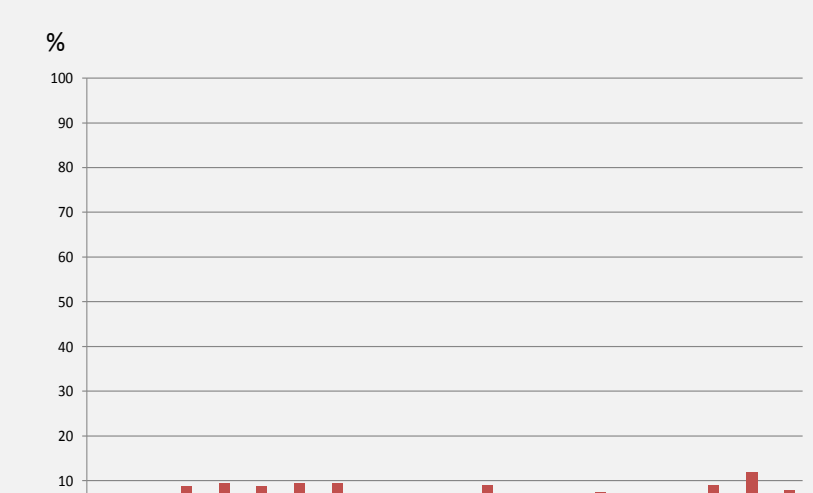


The BIOMEDICAL EQUIPMENT was assessed under the following parameters:

S. NO.	PARAMETERS
1.	Equipment has a preventive maintenance (PM) sticker which is up to date and contains all the 4 items
2.	A complaint has been raised for non functional equipment (if applicable) and a complaint # is available
3.	Equipment is clean and stain free
4.	Equipment is not damaged/ worn & torn/ rusted
5.	Bed Wheels are functional (check any 2)
6.	Bed locks are functional (check any 2)
7.	Bed side rails are functional (check any 2)
8.	Every wheel chair has a PM sticker which is up to date (check any 2)
9.	Every wheel chair has a PM sticker which is up to date (check any 2)
10.	Direction of flow of gases is marked in the gas panel(AVSU)
11.	Gases in the pipes are identified by name in AVSU
12.	Direction of opening and closure of gas valves is marked in AVSU
13.	Staff are aware as to where the gas panel key is located
Room safety	Call bell is provided at the bed side and is working properly
	Call bell is provided in the washroom and is working properly
	Call bells have hanging cords in washrooms
Nursing station	Point of care testing equipment quality check is done daily

ENGINEERING

AREA-WISE PERCENTAGE OF NON COMPLIANCE IN ENGINEERING



The ENGINEERING facility was assessed under the following categories:

- Wall
- Floor
- Doors
- Electrical Connection
- Stairs
- Room safety
- Corridors
- Medication Rooms
- Dirty Utility

MAJOR NON COMPLIANT AREAS:

- Patient Medication Drawers: Not locked
- Management of major HAZMAT spill
- Staff knowledge regarding fire
- Electrical distribution boards: not locked

NON COMPLIANCE

Medication drawers not locked

How to manage HAZMAT SPILL

Electrical Distribution Boards not locked

Staff knowledge on Fire Safety

PROPOSED INTERVENTIONS

- Email to floor managers and nursing TL

- Educating

- Re auditing in 2 days of email

- Mock Drills

- Poster

- Re auditing

Daily check for initial 1 week
Follow up weekly keeping security in loop

Training session