Summer Training at
Wockhardt Hospitals, Nagpur
(April 1–May 31, 2014)

Study of Patient Safety Compliance of Goals 1 2 and 3 in IPD Patient's of a Multi Specialty Hospital

By
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Under the guidance of
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MBA- Hospital & Health Management (MBA-HM)
2013-2015

The IIHMR University, Jaipur
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CERTIFICATE

This is to certify that **Dr.Rucha Atmaramani** has undergone her summer training at **WOCKHARDT HOSPITALS,NAGPUR** from 1st April, 2014 to 31st May, 2014.

The candidate has successfully carried out the project **"A study on Patient Safety Compliance in IPD Patient's** assigned to her during summer training and her approach to the study has been scientific and analytical.

The summer training is partial fulfilment of the course requirement.

I wish her success in all her future endeavours.

Mr.Alok Mathur
Associate Professor
IIHMR Jaipur

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

WOCKHARDT
HOSPITALS
Enhancing Quality of Life

May 30, 2014

TO WHOM SO EVER IT MAY CONCERN

This is to certify that Dr. Rucha Atmaramani (Student of Institute of Health and research, Jaipur) completed her Internship from **April 01, 2014 to May 31, 2014.**

Her topic was "Study on Patient Safety compliance of goal 1, 2 and 3 in IPD patients of a superspeciality Hospital".

During her aforesaid tenure, she has been found to be extremely honest, regular and sincere.

For **Wockhardt Hospitals Ltd.,**

P. Santosh
Manager - Human Resources

NABH

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ACKNOWLEDGEMENT

I extend my sincere gratitude to **Mr Sunil Shastrabudhee** ,chief administrative officer for giving me the opportunity to do this study and undergoing the process of learning at WOCKHARDT HOSPITALS,NAGPUR. I thank them for all the trust and faith they posed in me and I only hope that I have been able to live up to their expectations. Their guidance and support was helpful in enhancing my work.

I extend sincere gratitude towards **Mrs Preti jain** , manager- quality and operations who has been my mentor for the summer internship program & has been instrumental in helping me shape this study in a desirable way.

Last but not the least; I would like to thank the entire **staff of WOCKHARDT HOSPITALS NAGPUR** for their support and guidance. s

I would like to express my sincere thanks to **Dr. S.D. Gupta**, Director, IHMR, **Col. Dr. Ashok Kaushik**, **Dr Suresh Joshi, Ms. Seema Mehta (mentor)** and all my faculty members for the proper guidance and cooperation extended by them. I am also grateful to my parents, my family and my friends for giving me moral support.

However, I accept the sole responsibility for any possible error of omission and would be extremely grateful to the readers of this project report if they bring such mistakes to my notice.

Date – 6 TH JUNE, 2014 **Dr. Rucha Atmaramani**

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MISSION

"To serve and enrich the quality of life of patients suffering from diseases, through the efficient deployment of technology and human expertise, in a caring and nurturing environment with the greatest respect for human dignity and life."

Wockhardt Hospitals believe in setting the best practice standards in our services, continuously improving performance and exceeding the expectations of our patients as well as their families. We believe in building and maintaining long-term patient relationships, so as to become an essential resource for their well being. We believe in:

- Training and developing the best human resource as the key to deliver superior patient service.
- Consistently investing in technology and infrastructure to match international benchmarks.
- Leading the development of professional standards in Healthcare Management.
- Continuously educating the community about the prevention of cardiac disorders

VISION

"Wockhardt Hospitals will strive with excellence to fulfill the needs of the community in its chosen field of medical treatment"

Because of our emphasis on high teamwork we bring together all the necessary disciplines and skills from the many resources of our organization to serve our patients better and attempt to set the Wockhardt Care in a league of its own

This study was done at Wockhardt hospitals, Nagpur as an internship project and is being submitted in fulfillment of requirement for post graduate diploma in hospital management. The duration of internship was eight weeks.

About Wockhardt Hospitals, Nagpur

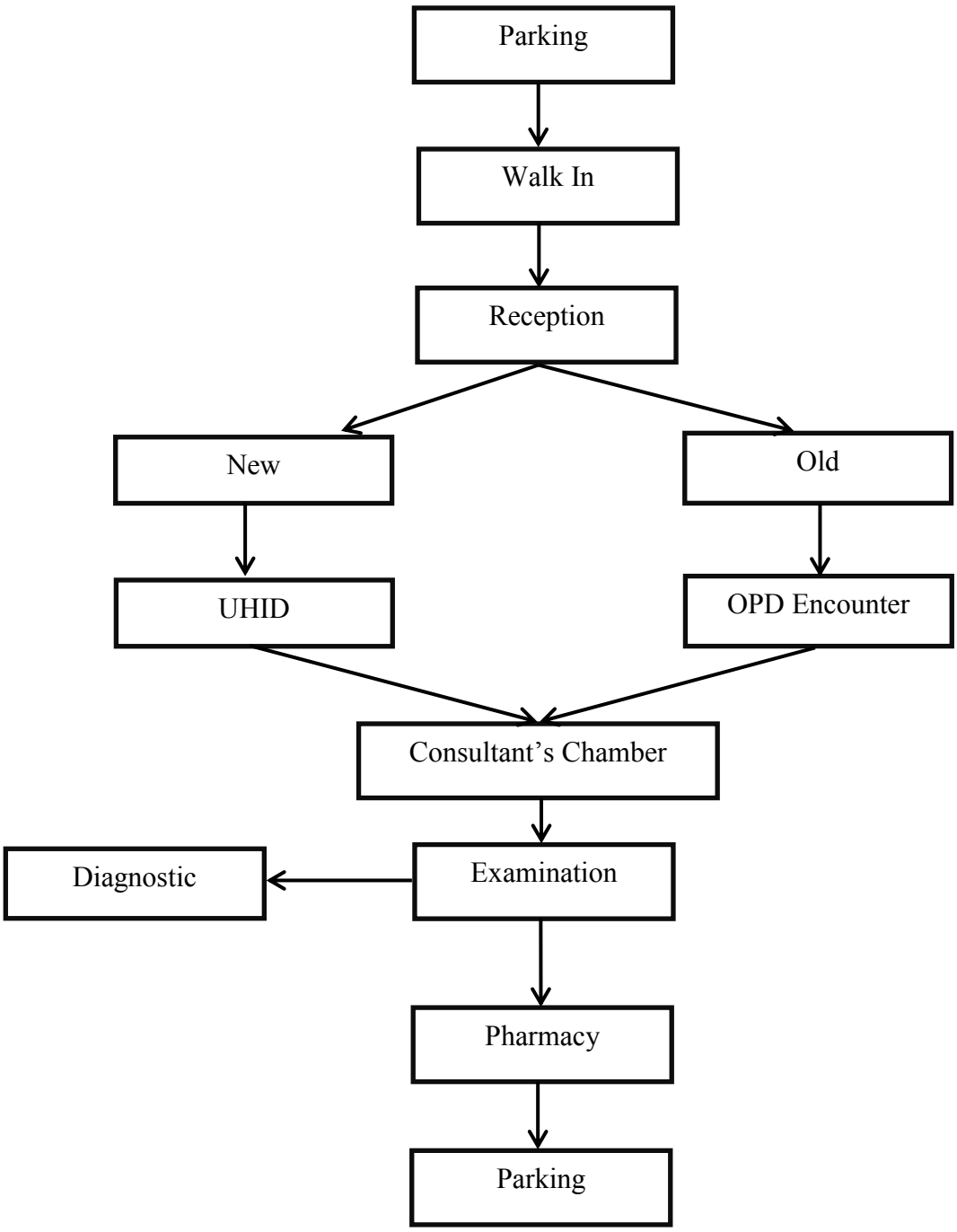
Wockhardt Hospital is located in the heart of Nagpur city is a 119 bedded super specialty hospital which provides services in Neurology, Neurosurgery, Orthopaedics, Minimal Access Surgery and Critical care besides other specialties like Urology, Nephrology, Medical and Surgical Oncology, Endocrinology, Gynaecology, Paediatrics, Emergency Care and Preventive Healthcare

FLOOR WISE PLAN

Floor	Specialties Available
Basement	Emergency, Physiotherapy And Engineering Department
Ground Floor	Main Reception, Outpatient Billing, OPD, Consultant's Chamber, Radiology Department, Inpatient Billing, TPA Desk, ECG/TMT/Echo, Phlebotomy, Pharmacy.
First Floor	OPD, Consultant's Chamber, Administration Department, It Department, Cath Lab, Cardiac ICU, EEG, EMG.
Second Floor	Medical ICU, Library, Cafeteria, Relatives Waiting Area,
Third Floor	Pathology, Dialysis Unit, IPD Bed No. 401 – 446, Medical Records Department,
Fourth Floor	IPD Bed No. 501 – 532, CSSD, Blood Storage Centre, Play Room, Relatives Waiting Area,
Fifth Floor	Operation Theater, Surgical ICU, Endoscopy Unit,

OPD

The General process flow that is followed in OPD is as follows :-



OPD is on two floors. Appointments are centralized and are recorded on the hospital information management system as soon as the appointment is fixed the patient are sent to the concerned consultant.

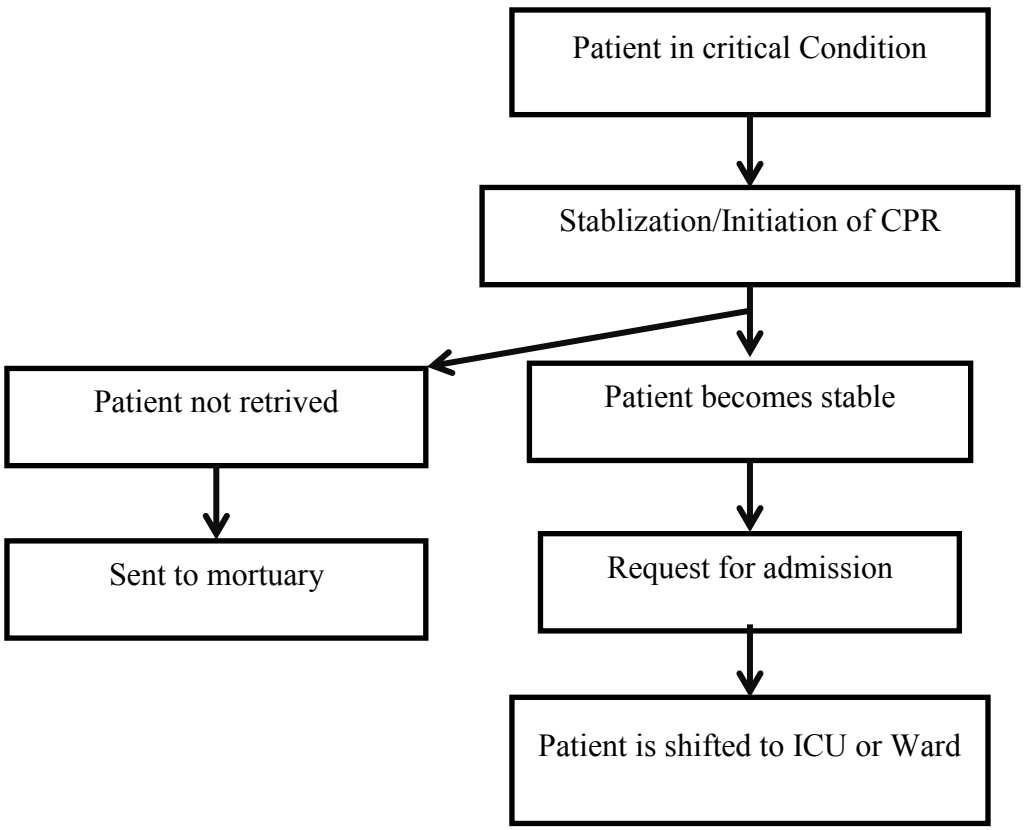
EMERGENCY DEPARTMENT

The Emergency Department offers ambulatory services, details are as follows :-

Sr. No.	Parameters	Details
1	No. of Ambulances	2
2	Type of Ambulances	Basic life support Advance life support
3	Ambulance staff	Doctor, Nurse, Technician

The emergency department is situated in the basement and the entrance is from a route different than the main entrance to the hospital.

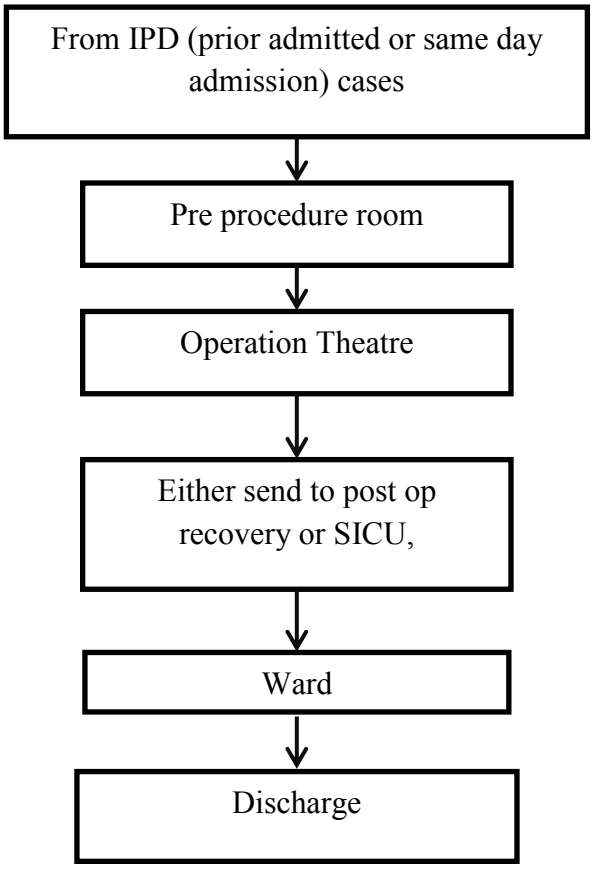
The flow of information in emergency department is as follows:-



OPERATION THEATRE

There is one functional OT compounded of ORTHO OT, Neuro OT, Surgical OT, Cardiac OT. There is a scrub area with dirty utility and clean utility room with equipment room instrument sterilization room pre operator preparation room and postoperative recovery room.

The general flow of patient in OT is as follows:-



NATIONAL PATIENT SAFETY GOALS

The purpose of NPSG is to promote specific improvements in patient safety. The goals highlight problematic areas in health care and describe evidence and expert based consensus solutions to these problems.

Recognizing that sound system design is intrinsic to the delivery of safe, high quality health care, the goals generally focus on system with solutions, wherever possible.

GOALS

The following is the list of all goals:-

NPSG.1 Identify patients correctly

NPSG.2 Improve Effective Communication

NPSG.3 Improve the safety of Medications

NPSG.4 Ensure Correct site, Correct procedure, Correct patient surgery

NPSG.5 Reduce the risk of Health Care Associated Infections

NPSG.6 Reduce the risk of patient harm resulting from falls.

GOAL 1 IDENTIFY PATIENTS CORRECTLY

Standard NPSG 1

The organisation develops an approach to improve accuracy of patient identification.

Intent of NPSG.1

Wrong patient errors occurs virtually in all aspects of diagnosis and treatment. Patient may be sedated, disoriented or not fully alert, may change rooms, beds and locations within the hospitals or may have sensory disabilities or may be subject to other situations that may lead to errors in correct identification. The intent of this goal is twofold:-

1) First to reliably identify the individual as person for whom the service or treatment is intended.
2) Second to match the service or treatment to that individual.

3) Policies and/or procedures are collaboratively developed to improve identification processes in particular:-

The processes are used to identify a patient while giving medication, blood or blood products taking blood and other specimens for clinical testing providing any other treatments or procedures. The policies and or procedures requires at least two ways to identify a patient, such as the patient's name, identification number, birth date, a bar coded wrist band or other ways. The patient room number or location cannot be used for identification in different location of patient care areas.

Measurable Elements of NPSG.1

1. Patients are identified using two patient identifiers, not including the use of patient's room number or location.
2. Patients are identified before administering medications, blood or blood products.
3. Patients are identified before taking blood and other specimens for clinical testing.
4. Patients are identified before providing treatment and procedures.
5. Transfer of patient to another unit.

GOAL.2 IMPROVE EFFECTIVE COMMUNICATION

Standard NPSG.2

The organisation develops an approach to improve effective communication amongst the caregivers.

Intent of NPSG.2

Effective communication which is timely, accurate, complete, unambiguous and understood by the recipient, reduces errors and results in improved patient safety. Communication can be verbal, written or electronic.

The most error prone communications are patient care orders given verbally or those given over the telephone when permitted under local laws and regulations. Another error prone communication is the report back of critical tests results such as

the clinical laboratory telephoning the patient care unit to report the results of a STAT test.

Measurable Elements of NPSG.2

1. The complete verbal and telephone order or test result is written down by the receiver of the order or test result.
2. The complete verbal and telephone order or test result is read back by the receiver of the order or test result.
3. The order or test result is confirmed by the individual who gave the order or advised for the test.
4. Policies and procedures support consistent practise in verifying the accuracy of verbal and telephonic communication.

GOAL 3 IMPROVE THE SAFETY OF MEDICATION

Standard NPSG.3

The organisation develops an approach to improve the medication safety amongst patients.

Intent of NPSG.3

When medications are a part of patient treatment plan appropriate management is critical to ensure.

Patient Safety : Some Medications carry a higher risk for adverse outcomes as well as look alike or sound alike medications. The most effective means to reduce or to eliminate the occurrences is to develop process for managing medication safety.

Measurable elements of NPSG3

1. Policies and procedures are developed to address the identification location labelling and storage of medications
2. Concentrated electrolytes are not present in patient care unit unless clinically necessary.
3. Actions are taken to prevent inadvertent administration in those areas there permitted by policy.

4. Medications are stored in patient care unit with proper labelling and stored in manner that restricts access.

GOAL 4 CORRECT SITE, CORRECT PROCEDURE, CORRECT PATIENT SURGERY,

Standard NPSG4

The organization develops in a approach to ensure Correct site, correct procedure, correct patient surgery.

Intent of NPSG4

Wrong site, wrong procedure, wrong patient surgery, is an alarmingly common occurrence in health care organization. These errors are result of ineffective or inadequate communication between members of surgical team, lack of patient involvement in site marking, and lack of procedures for verifying the operative site. In addition, inadequate patient assessment, inadequate medical record review, a culture that does not support open communication amongst surgical team members, problems related to illeligible handwriting, and the use of abbreviations are frequent contributing factors.

The essential protocol followed is :-

- Marking the surgical site
- A preoperative verification process and
- A time-out that is held immediately before the start of procedure.

Marking the surgical site involves the patient and is done with and instantly recognizable mark. Mark should be consistent throughout the organization, should be made by the person performing the procedure, should take place with patient awake, if possible and must be visible after the patient is prepared and draped. The surgical site is marked in all cases involving internally multiple structures or multiple levels.

The purpose of preoperative verification process is to

- Verify the correct site, procedure and the patient
- Ensure that all relevant documents, images and sturdies are available, properly labelled and displayed.
- Verify any required special equipment and or implants are present.

The time-out formats any unanswered questions or confusion to be resolved. The time-out is conducted in the location the procedure will be done, just because starting the procedure and involves the entire operative team. The organisation determines how the time-out procedure is to be documented.

Measurable elements are NPSG4

- The organisation uses an instantly recognisable mark for surgical site identification and involves the patient in marking process.
- The organisation uses a checklist or other process to verify preoperatively the correct site, correct procedure and correct patient and that all documents and equipment needed are on hand, correct and functional.
- The full surgical team conducts and documents time-out procedure just before starting a surgical procedure.
- Policies in procedure are developed that will support uniform processes to ensure the correct site, correct procedure and correct patient.

GOAL 5 REDUCE THE RISK OF HEALTH CARE ASSOCIATED INFECTIONS

Standard NPSG5

The organization develops an approach to reduce the risk of healthcare associated infections.

Intent of NPSG5

Infection prevention and control are challenging in most health care settings and rising rate of health care associated infections are major concern for patients and health care practitioner. Infections common to all health care settings are include catheter-associated urinary tract infections, blood stream infections and Pneumonia

(often associated with mechanical ventilation). Control to elimination of these and other infections is proper hand hygiene.

Measurable elements of NPSG5

- The organisation has adopted the hand hygiene guidelines from WHO.
- The organisation implements effective hand hygiene programmes.
- Policies and procedures are developed that supports continued reduction of health care associated infections.

GOAL 6 REDUCE THE RISK OF PATIENT HARM RESULTING FROM FALLS.

Standard NPSG6

The organization develops an approach to reduce the risk of patient harm resulting from falls.

Intent of NPSG6

Falls account for a significant portion of injuries in hospitalized patients. In context of population it serves, the services it provides and its facilities the organization should evaluate the patient's risk for falls and take action to reduce the risk of falling and reduce the risk of injuries that occurs due to fall. The evaluation could include fall history, medications and alcohol consumption review, gait and balance screening and walking aids used the patient. The program monitors both the intended and unintended consequences of measures taken to reduce falls.

Measurable elements of NPSG6

- The organisation implements a process for the initial assessment for patient fall risk and reassessment of patients who are indicated by change in condition or medication.
- Measures are implemented to reduce fall risk for those assessed to be at risk.
- Measures are monitored for results both successful fall injury reduction and any unintended consequences.
- Policies and procedures supports continue reduction of risk of patient harm resulting from fall in organisation.

Improve the Accuracy of Patients Identfication

NPSG Goal-1 Audit

AIMS AND OBJECTIVES

AIM: To audit the compliance of NPSG Goal-1 at the time of carry out any bed side activity in wards of multi- specialty hospital so as to determine gap and reasons for observe non compliance.

OBJECTIVES

- To audit compliance with NPSG1
- To determine the extent of gap between calculated value of percentage compliance and standard compliance rate.
- To identify the reasons leading to the gap.
- The facilitate the implementation of corrective actions.

METHODOLOGY

Study Design	:	Observational study
Study Place	:	WOCKHARDT HOSPITALS, NAGPUR.
Audit Duration	:	1st April to 31st May
Sampling Method	:	Convenient sampling from wards (level 4 and level 5)
Audit tool	:	
NPSG1	:	Observation checklist and interview schedule

Key measures of NPSG1

- Observation of care giver using 2 patient identifiers before :
- Administering medications .
- Administering Blood and Blood Products.
- Taking blood and other specimens for clinical testing.
- Providing treatment and procedures.
- Transfer to another unit.
- Interview the patient and care giver on the use of patients identifiers at the above mentioned instances.

ACTIVITIES DONE

Observing if all patients are wearing specific ID bands with correct color coding as per patient's medical status.

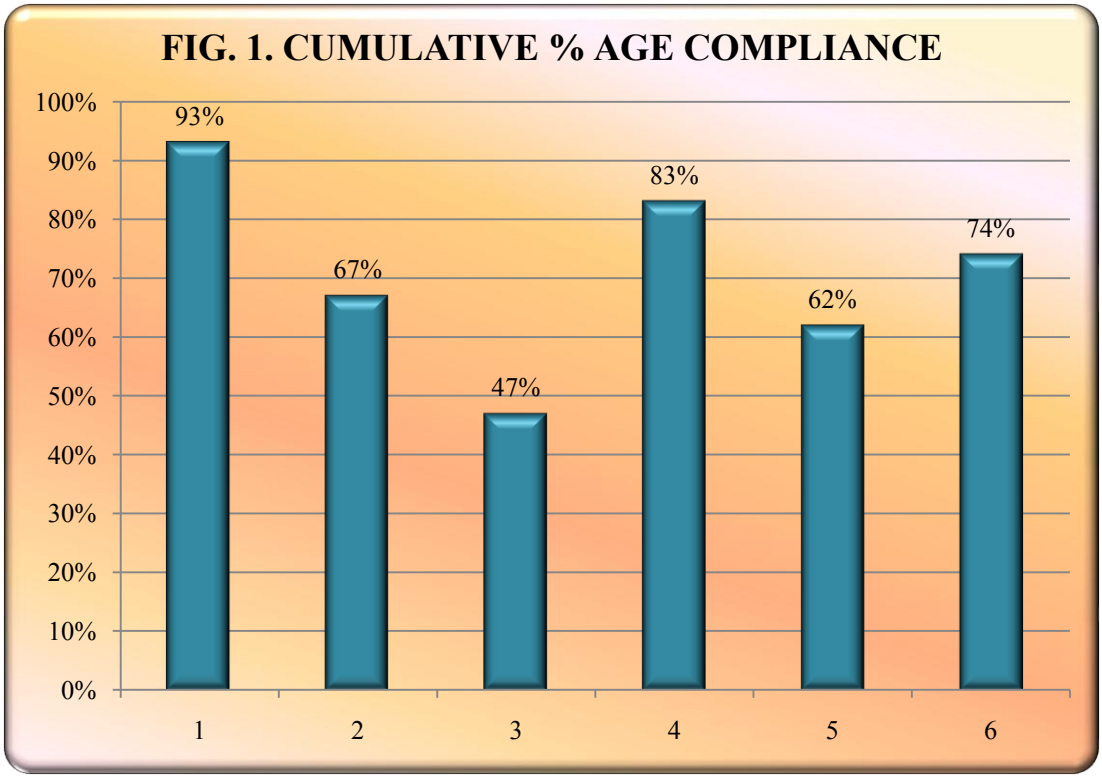
To observe care giver whether checking patient ID band before providing any medication or procedure.

To interview patients and care givers over checklists points and determining compliance rate as per their responses

All observations recorded in the field were coded compile and analyzed based on following formulae.

ID band compliance rate = no. of patients wearing ID band with all particulars printed legibly/total no. of patients taken in a sample X 100.

Audit Check List Compliance is Seen to Be

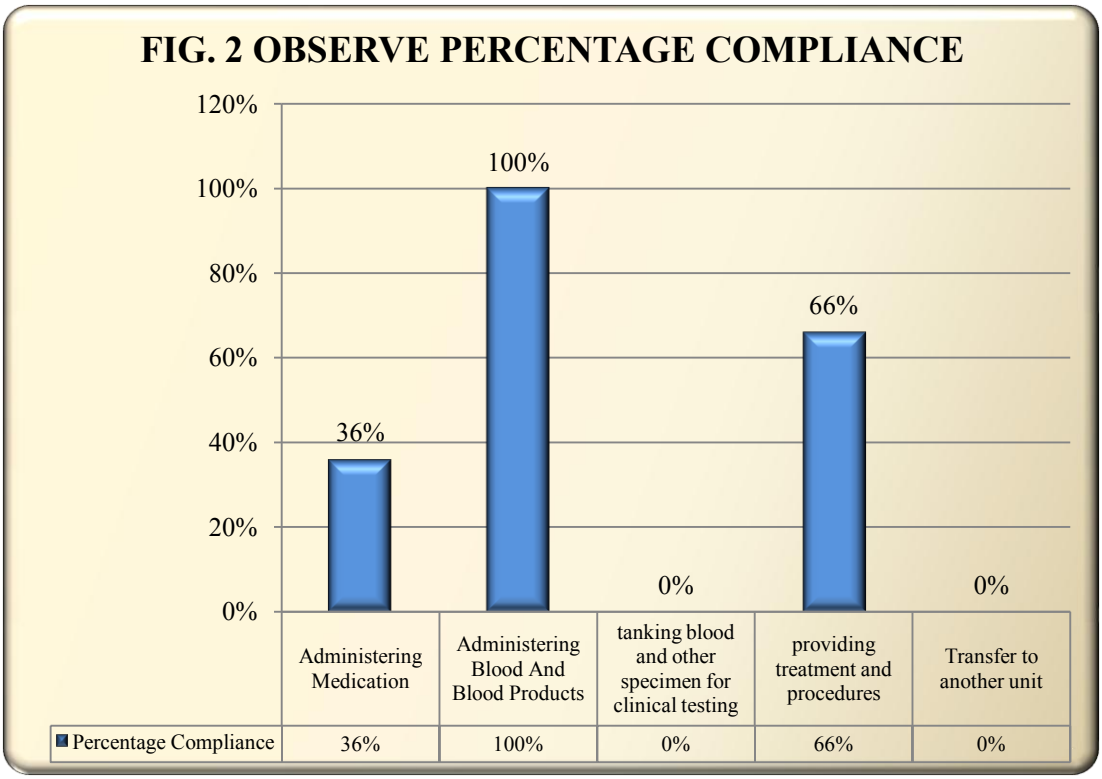


Note : 1. Patients wearing correct legible ID band. 2. Care giver checking ID band before bed side activity. 3 Patients interviewed for the heads. 4. Care giver stating two patients Identifiers. 5 Care givers stating instances of checking patients identification. 6. Care givers stating methods of Identifying patients.

Interpretation of Figure 1

- Out of total sample of 30 patients 2 patients were not wearing the ID band so the percentage is 93 instead of 100%.
- This is less in practice on site ID band check patients file is the major source of recognition.
- Patient responses are subjective.
- Nurses knowledge about the importance of ID band is poor.
- On stating methods nurses do miss out on certain heads.

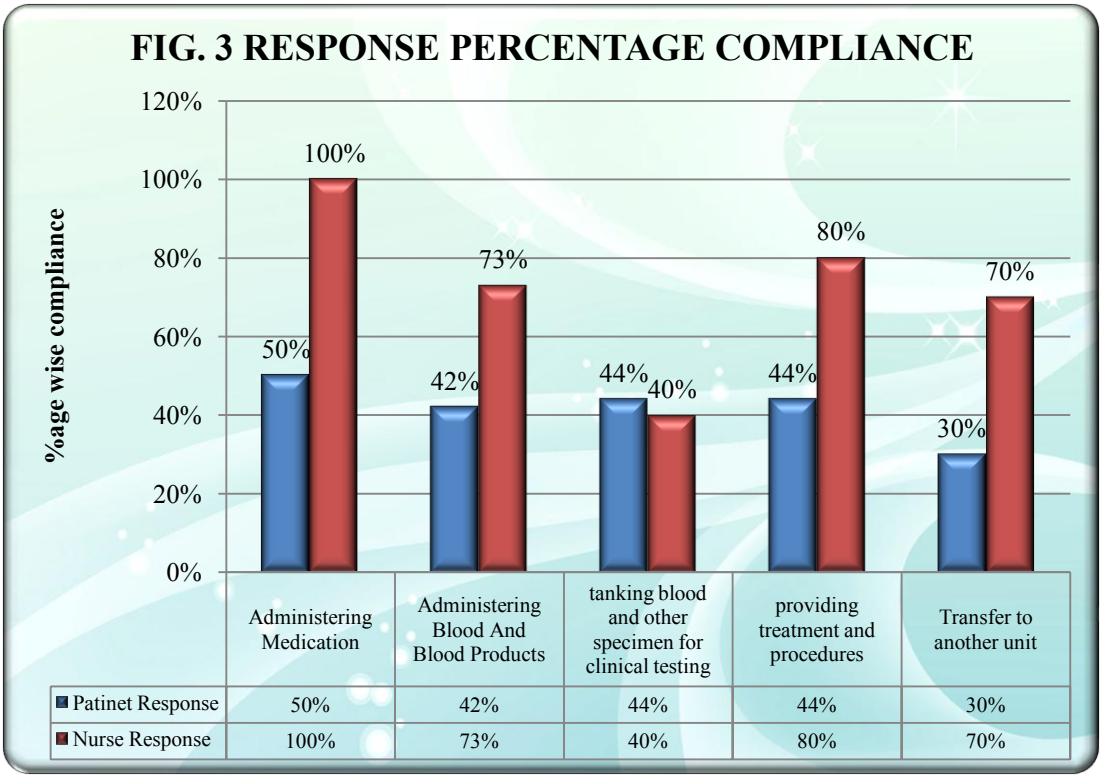
Compliance Based on Observations



Interpretation of Figure 2

1. On observation patient were identified only in 36% cases before medication.
2. Blood products where definitely given after patient recognition.
3. Specimen and sample taking and transfer to another unit these cases where not encounter.
4. During procedure 66% verified for identification.

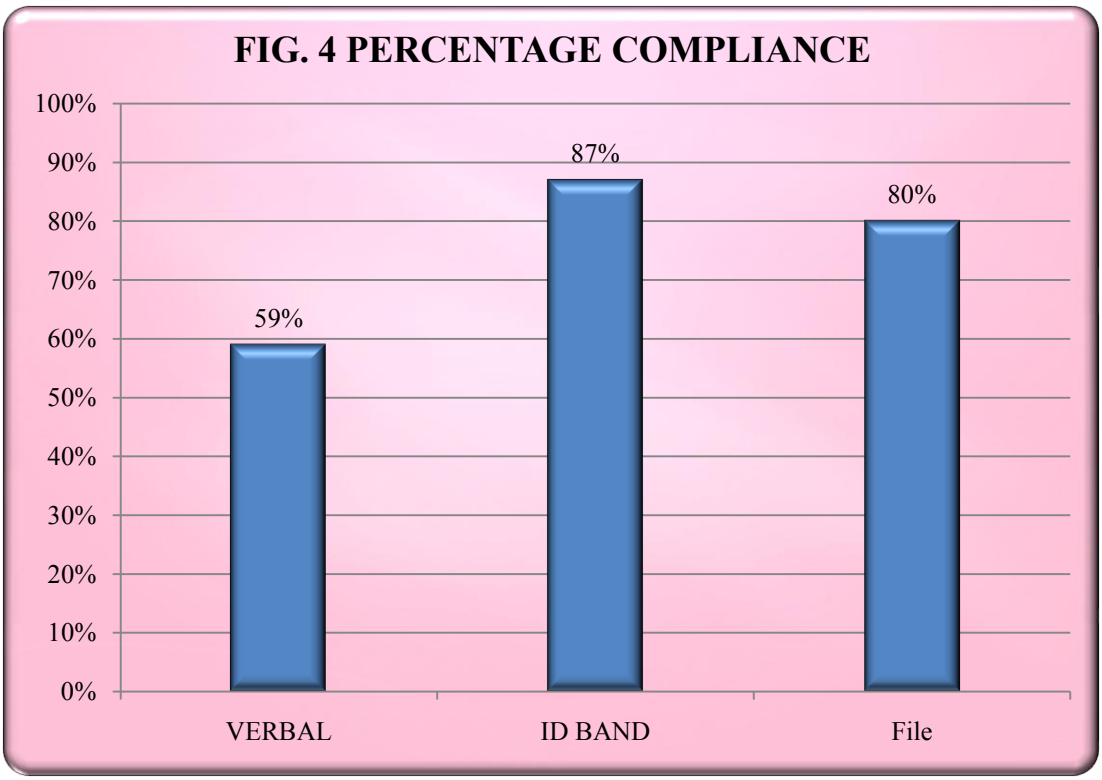
Parameter Wise Percentage Compliance



Interpretation of Figure 3

1. Interviewing reflects large difference in patient and nurse response in administering medication.
2. Same is for blood products but patient respond can be subjective.

Mode of Patients Recognition as Responded By Nurse



Interpretation of Figure 4

1. Accurate process of checking patient identification by all 3 components – (patient, ID bands, file) not followed instead just one identifier at a time was followed and is not crosschecked before giving medications.

Reccomendations to overcome the gap

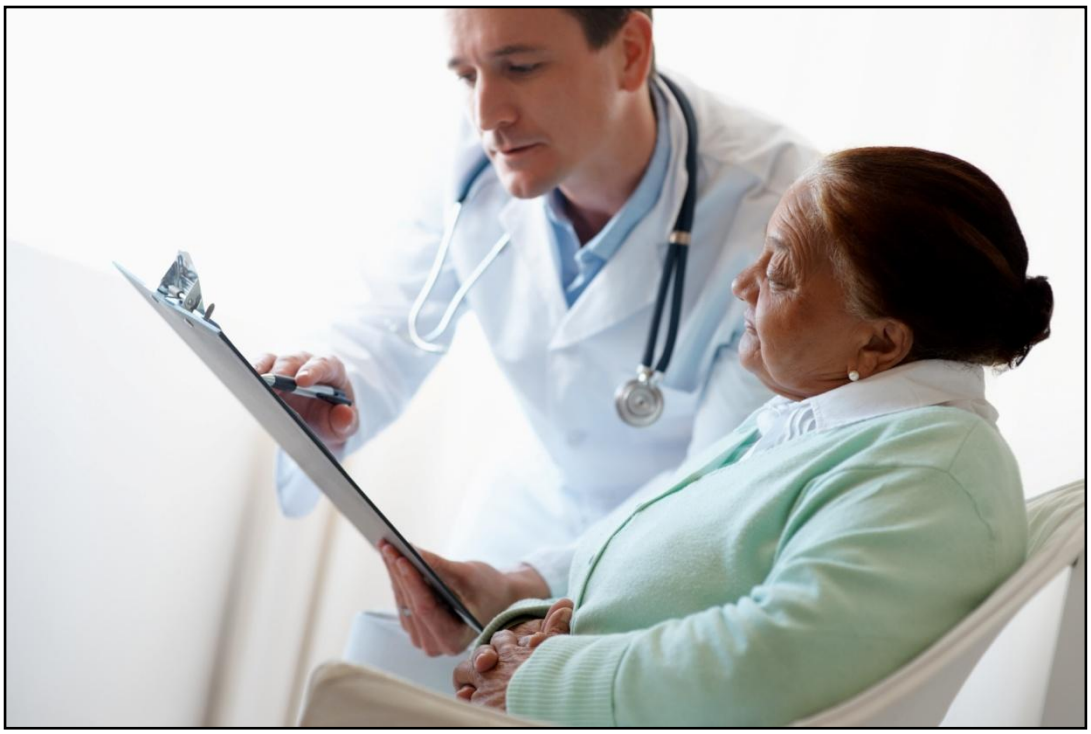
- The caregivers were communicated about the points they missed and guided about the hazardous consequences that may arise.
- Findings of audit were communicated to the medical administrator of the wards.
- In a staff meeting all the findings were presented and emphasized on achieving 100% compliance for all the parameters of NPSG-1 audit list.

AUDIT QUESTIONNAIRE USED FOR GOAL ONE

QUESTIONNAIRE					
Patients		**UHID**	**UHID**	**UHID**	**UHID**
Do the nurses and other care givers check your ID band before					
1.	Administering Medication				
2.	Administering Blood And Blood Products				
3.	tanking blood and other specimen for clinical testing				
4.	providing treatment and procedures				
5.	Transfer to another unit				
Nurses/Care giver					
State two patients identifier					
1.	Administering Medication				
2.	Administering Blood And Blood Products				
3.	tanking blood and other specimen for clinical testing				
4.	providing treatment and procedures				
5.	Transfer to another unit				
Method of checking patients identity? (Verbal+ID band+File)					

AUDIT on GOAL 2

Effective Internal Communication



NPSG goal 2 audit

Aim and objectives

Aim

To audit the compliance of NPSG2 to determine gap between the patient and care givers.

Objectives

- To audit the compliance with NPSG2.
- Identify the reasons leading to the gap.
- To facilitate implementation of corrective action.

Methodology

Study Design	:	Observational study
Study Place	:	WOCKHARDT HOSPITALS, NAGPUR.
Audit Duration	:	1st April to 31st May
Sampling Method	:	Convenient sampling from wards (level 4 and level 5)
Sample size	:	30
Audit tool	:	
NPSG2	:	Observation checklist

Check list for effective internal communication

I. Standardized approach followed to :

   a. Hand over communication between staff

   b. Change of shift.

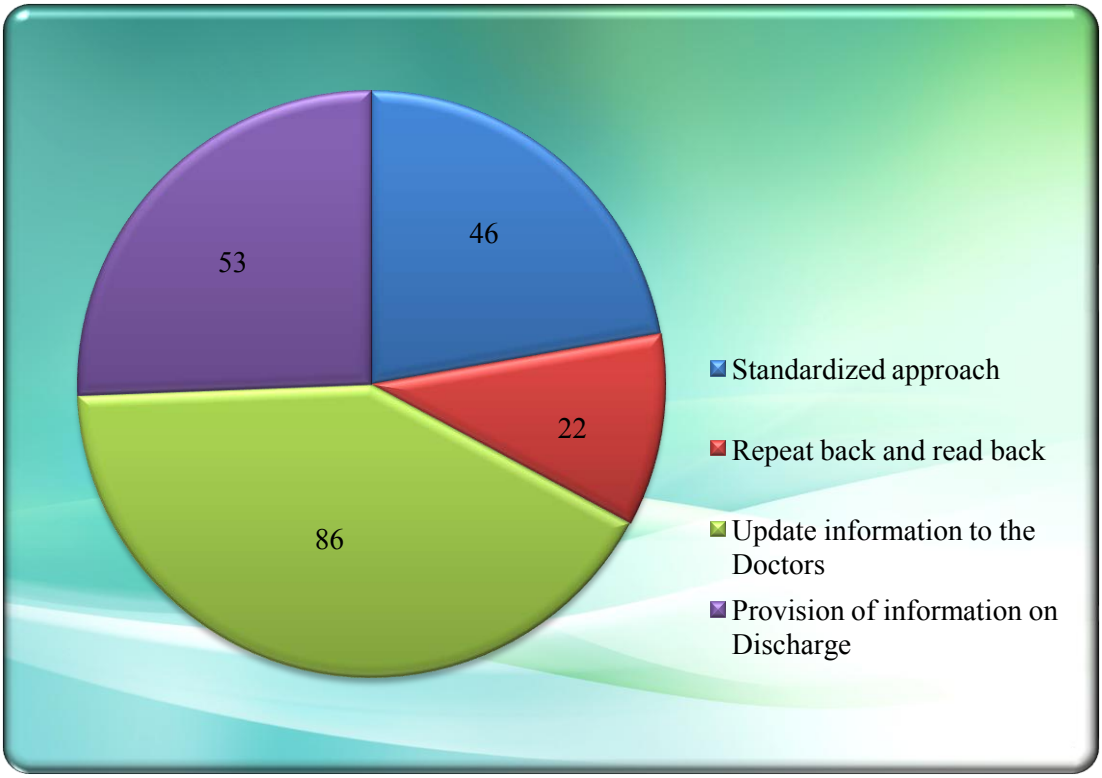
   c. Between different care units in case of patients transfer.

II. Repeat back and read back used in hand over processes.

III. Responsible provider has update information regarding patient's status, medications, treatment plans and any other significant changes.

IV. On discharged provide the patients and next provider of care with information on discharge diagnosis treatment plans, medications and test results.

%Age Wise Observation For Effective Internal Communication



Interpretation of above pie chart

1. Amongst the patients within the sample size the standardized approach was followed only in 46% of the patients.
2. The Repeat back and Read back was given only to 22% of the cases.
3. 86% of the doctors has the proper update about the orders given to their patients.
4. On Discharge the proper information was given to next care givers in 53% of cases. (But in DAMA cases the information given was incomplete.)

Recommendations to overcome barrier in internal communication.

- Focus on improving open communication.
- Integrating responsibilities for planning and problem solving.
- Shared decision making and coordination.
- Adoption of SBAR.

GOAL 3: IMPROVE MEDICATION SAFETY

Aim and objectives

Aim

To audit the compliance of NPSG3 to determine gap between the patient and care givers.

Objectives

- To audit the compliance with NPSG3.
- Identify the reasons leading to the gap.
- To facilitate implementation of corrective actions.

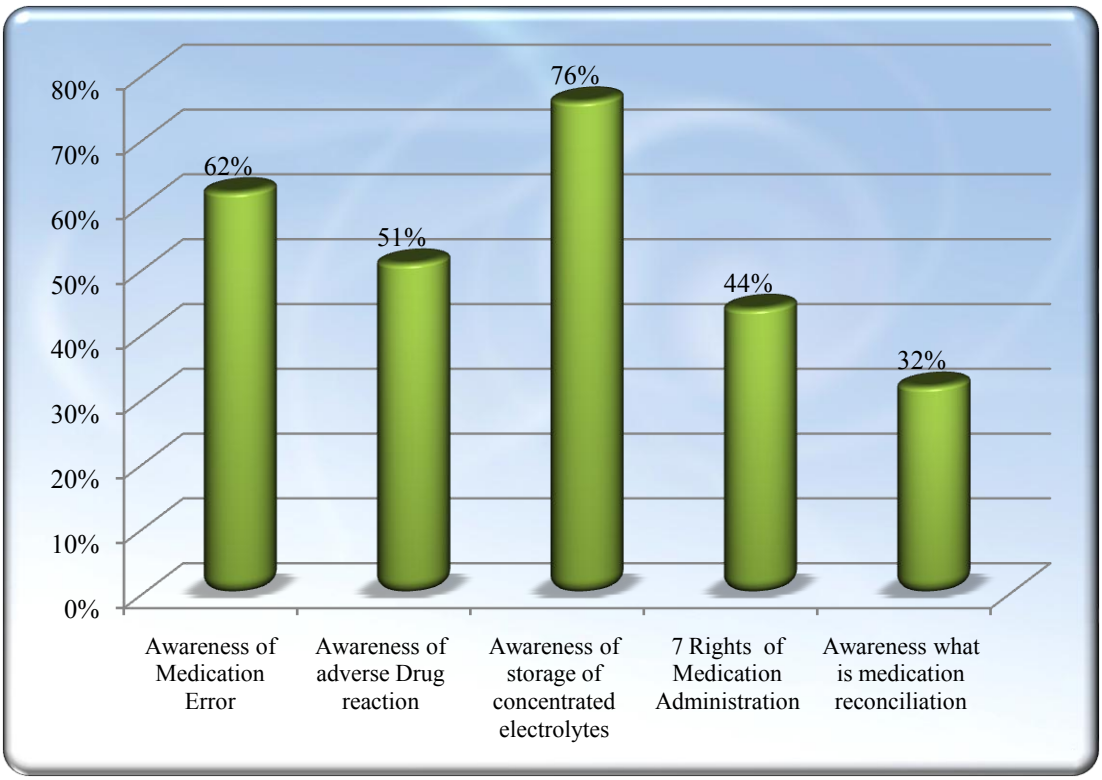
Methodology

Study Design	:	Observational study
Study Place	:	WOCKHARDT HOSPITALS, NAGPUR.
Audit Duration	:	1st May to 31st May
Sampling Method	:	Convenient sampling from wards (level 4 and level 5)
Sample size	:	30
Audit tool	:	Observation checklist

MEDICATION ADMINISTRATION & RECONCILIATION CHECKLIST

S. No.	Criteria	Dept.		Dept.	
		Y	N	Y	N
1.	Is the staff aware of the Medication Error Reporting procedure?				
2.	Is the staff aware of who can report Medication Error?				
3.	In the staff aware of the protocol for what had to be done- If a patients suffers from an adverse drug reaction after administration of drugs.				
4.	Is the staffs aware of what a Concentrated electrolytes? Where are the stored?				
5.	What is a prescription error?				
6.	Is the staff aware of which committee discusses issues related to medication Error & Adverse drug reaction?				
7.	Is the staff aware of what is Double check for High Alert Drugs & Concentrated Electrolytes?				
8.	Is the staff aware of what is cold chain policy for drugs?				
9.	What are the 7 rights of administration?				
10.	Is the staff aware of what is medication reconciliation?				

% age wise observation of Medical Reconciliation and Administration



Interpretation of Medical Reconciliation and Administration

1. 62% of the nursing staff were aware of medication error and their effects on patients.
2. 51% of the staff was aware about what is adverse drug reaction and necessary actions to be taken at the occurrence.
3. 76% of the staff was aware about the hazardous effect on patients if concentrated electrolytes are kept near patients.
4. Only 44% of the staff was aware about the 7 rights of medication administration.
5. 32% of the staff had knowledge about what is medication reconciliation.

Reccomendations to overcome the above gap

- All the findings were discussed in detail with the nursing head and deputy nurse.
- A proper training session was recommended for the nurses.
- Importance of above parameters for the patient safety have been explained and emphasis was given to achieve 100% compliance with respect to above checklist.