

IMPLEMENTATION OF PRESCRIPTION REVIEW



*An initiative for better medication
safety*

Guided by :
Mr. J.P Singh
Assistant Professor
IIHMR, Jaipur

Submitted by :
Dr. Chitra Parmar
PGDHM 17th Batch
IIHMR, Jaipur

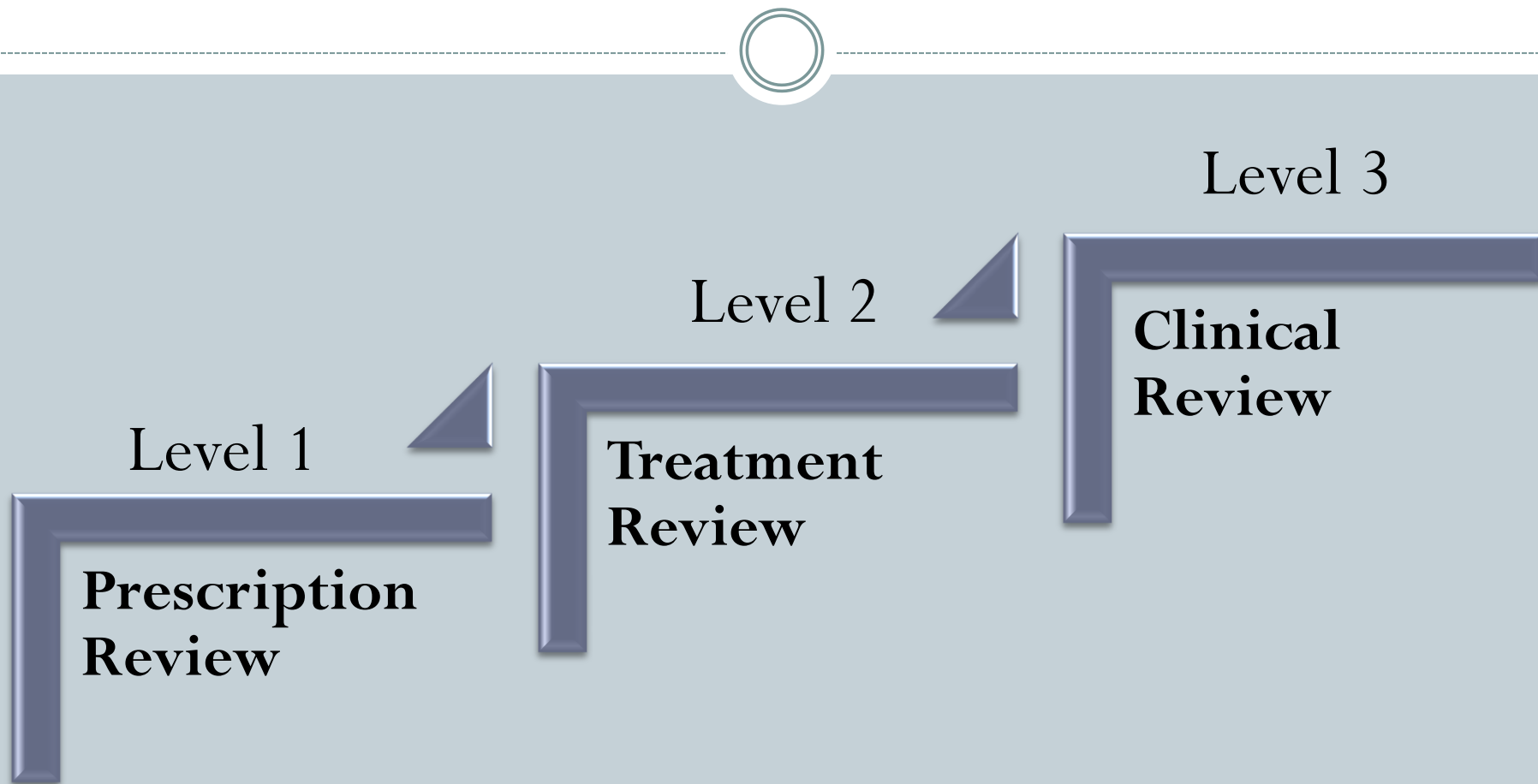
Medication Review



- Medication review is “a structured critical examination of a patient’s medicines with the objective of minimizing the number of medication related problem.



Levels of Medication Review



Why prescription Review



To improve medication safety

- Minimize the risk of Drug to Drug and Drug to Food interactions proactively
- Reduce drug error related morbidity and mortality by reducing medication errors

To enhance patient safety

- Reduce the treatment cost to the patients that may arise as a result of preventable medication error
- Ultimately helps to gain patient trust and satisfaction

To Facilitate Accreditation

- NABH
- JCI

Objective



GENERAL

- To implement prescription review by the consultants in the In- patient department of Internal medicine at FMRI, Gurgaon

SPECIFIC

- To carry out baseline study before the implementation of prescription review
- To implement prescription review by the consultants for In-patients in Internal Medicine department
- To calculate the percentage compliance to prescription review by the consultants
- To find out the relationship between the prescription review and errors in prescription writing

Methodology



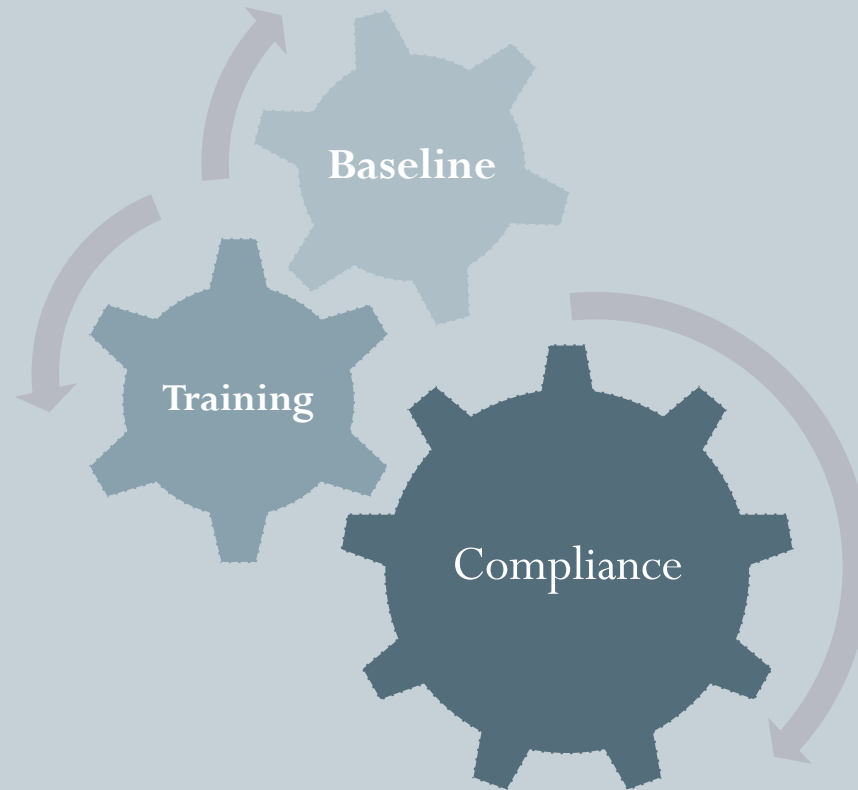
STUDY DESIGN

- **Study type** - Interventional Study
- **Study area** - FMRI, Gurgaon
- **Sample population** - Prescription orders of a particular date of all the patients of internal medicine (excluding ICU) admitted during the study phase duration
- **Study tool** - Audit checklist
- **Sampling method** - Non Probability Sampling
- **Sampling type** - Convenient Sampling
- **Sample size** - 40 % of the total population.
- **Sources of Data** - Patient files, medical records, Medication order and administration record sheet(MAR sheet)

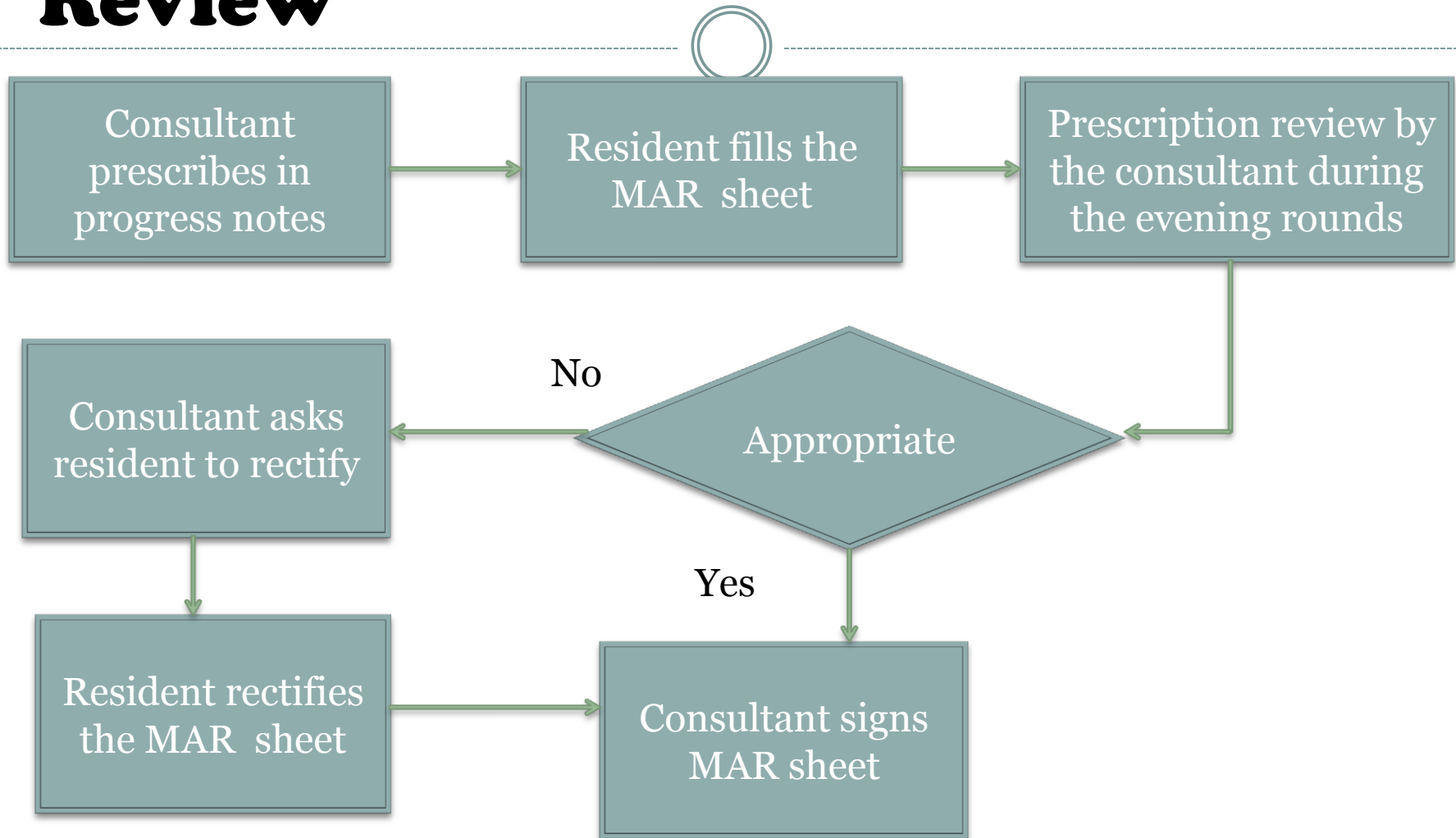
Methodology



The study was carried out in three phases



Implementation of Prescription Review



Parameters of Prescription Review



- Appropriateness of the drug, dose, frequency and route of administration.
- Therapeutic duplication
- Real or potential allergies or sensitivities
- Real or potential interactions between the medications or food
- Variation from organization criteria for use
- Patient's weight and other physiological information
- Other contraindications

Parameters of Audit tool

PROGRESS NOTES

- Drug name(legibility)
- Dosage form mentioned
- Dose mentioned
- Frequency mentioned
- Sign

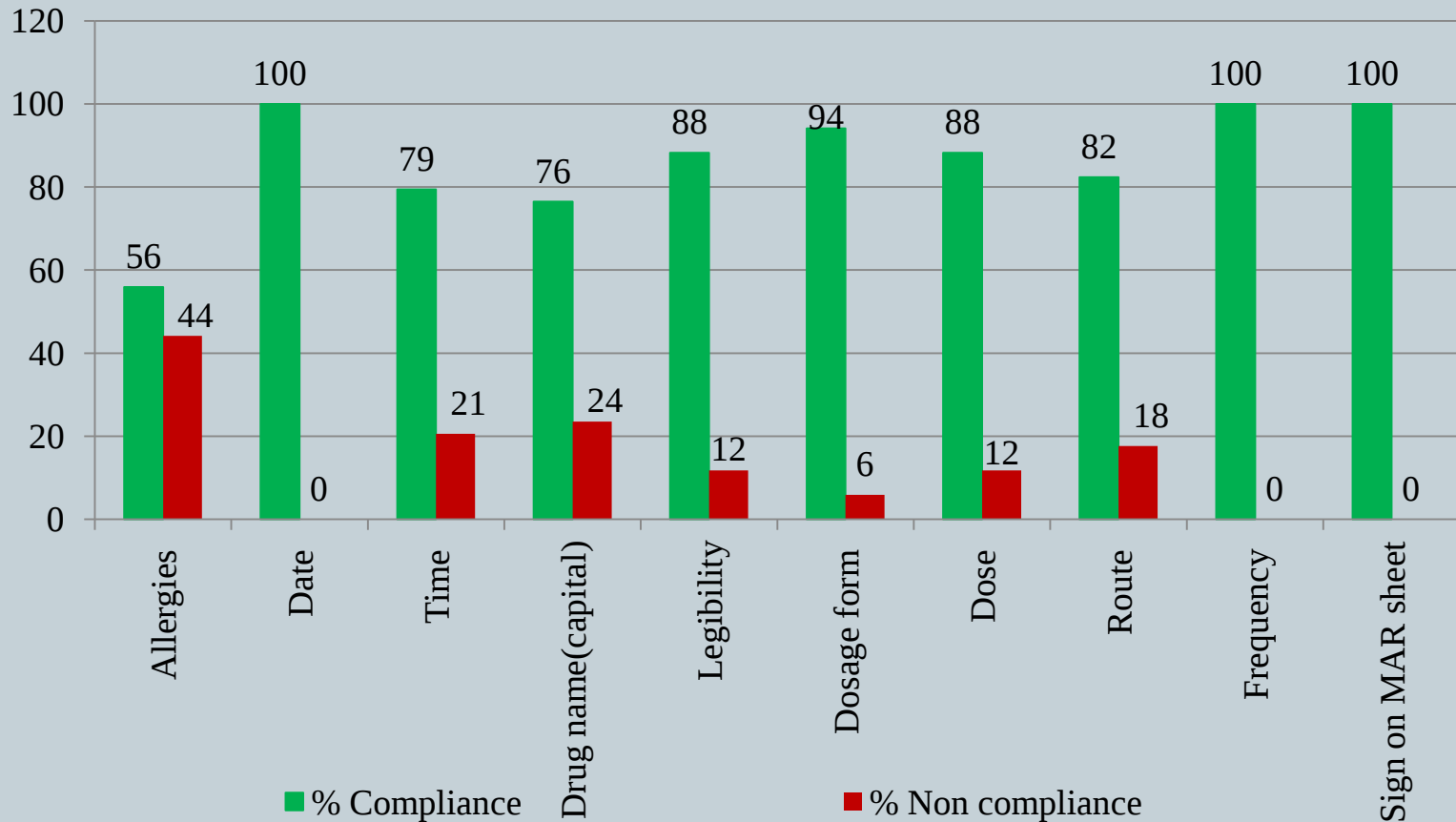
MAR

- Allergies
- Date
- Time
- Drug name (capital)
- legibility
- Dosage form
- Dose
- Route
- Frequency
- Sign on MAR sheet by residents
- Prescription reviewed by consultants

Analysis and Interpretation



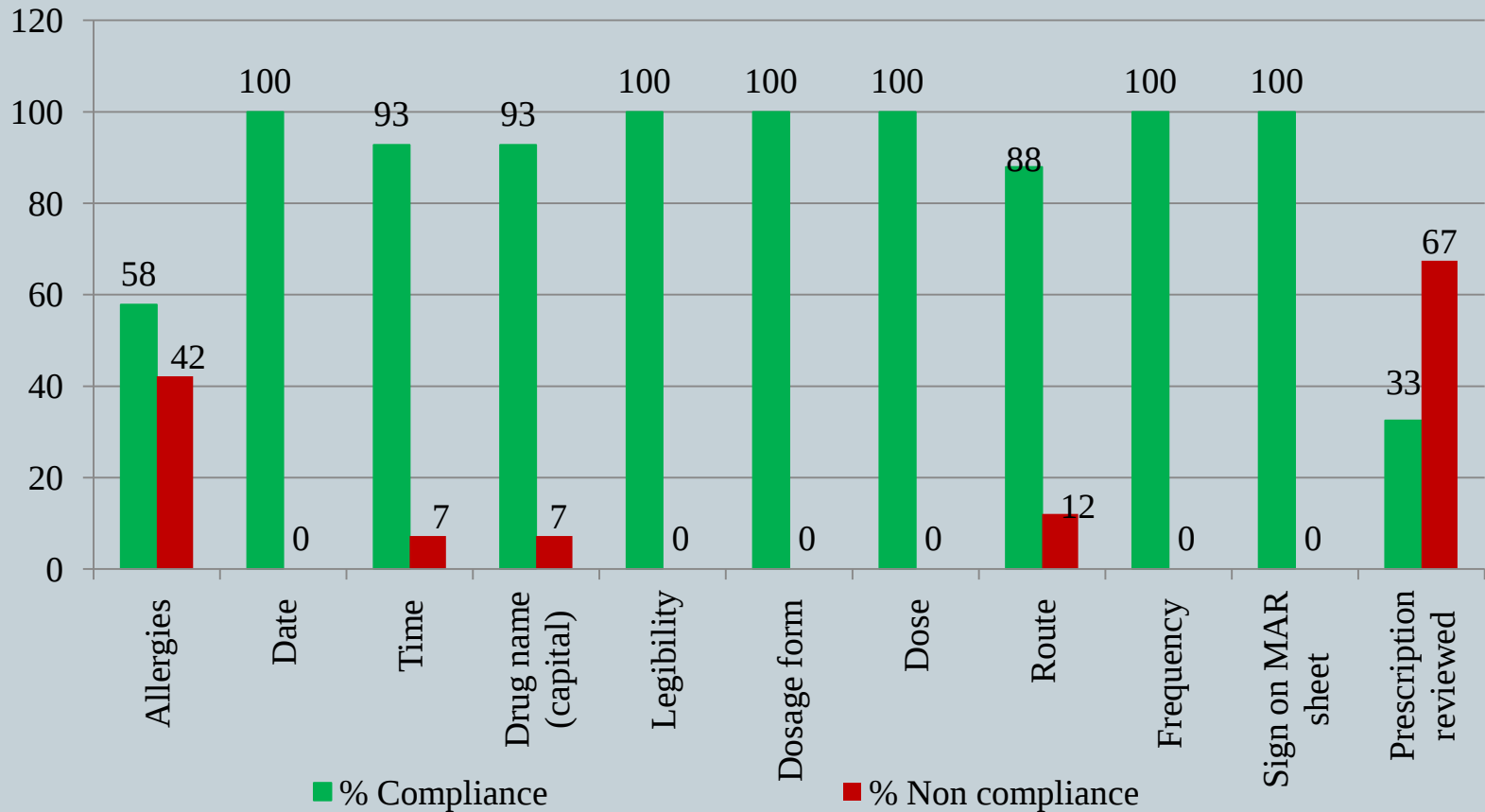
Baseline Audit



Analysis and Interpretation



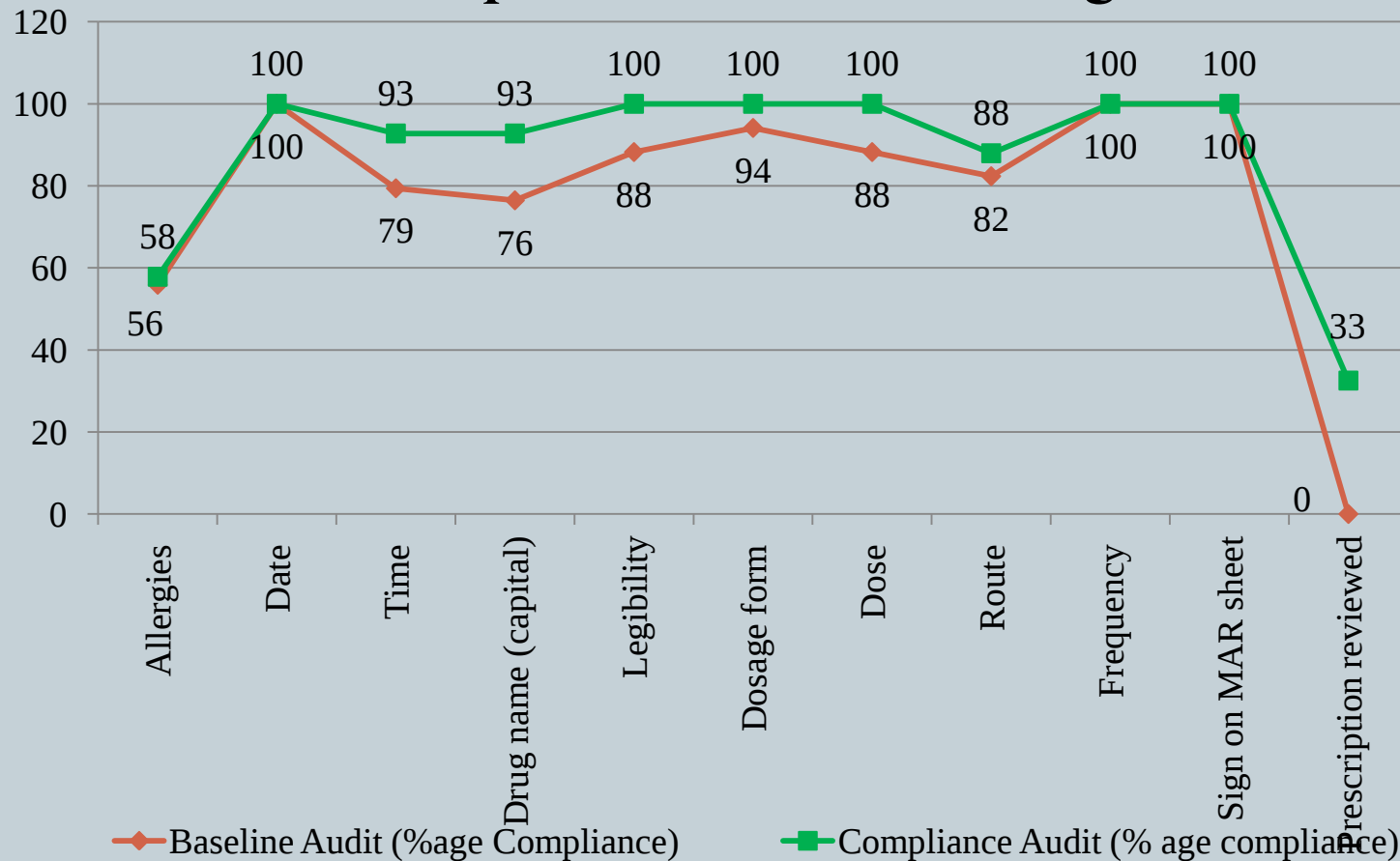
Compliance Audit



Analysis and Interpretation



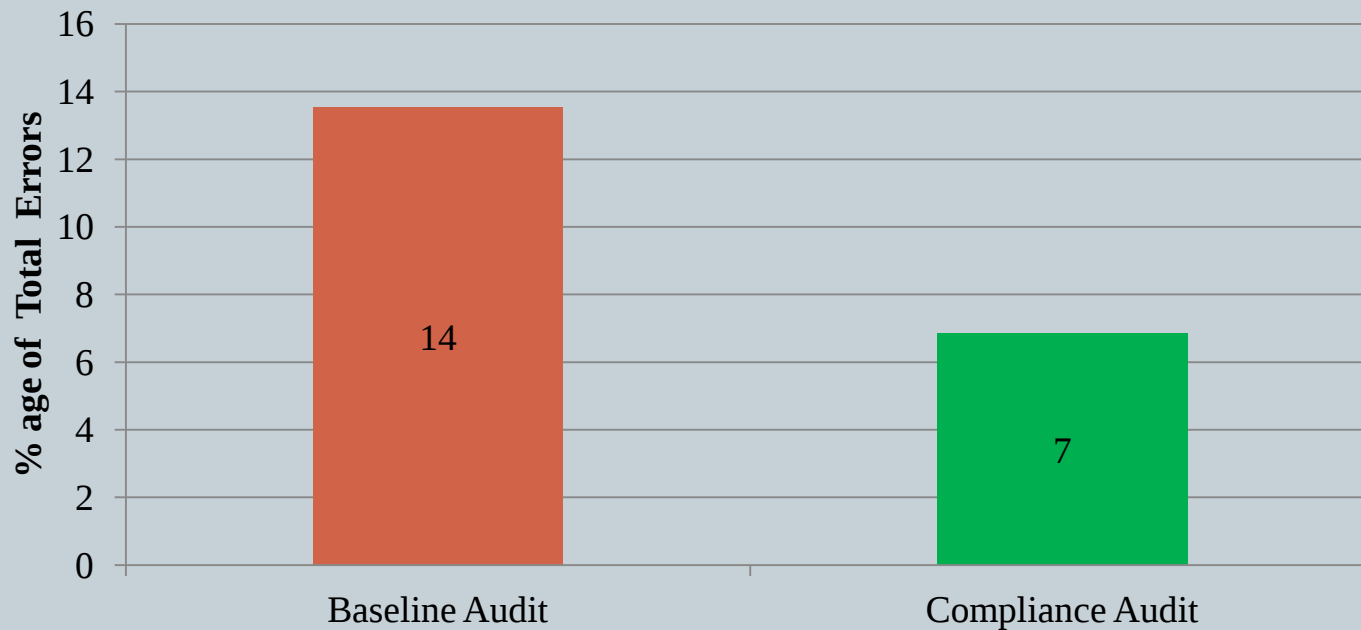
Comparison of Audit findings



Analysis and Interpretation



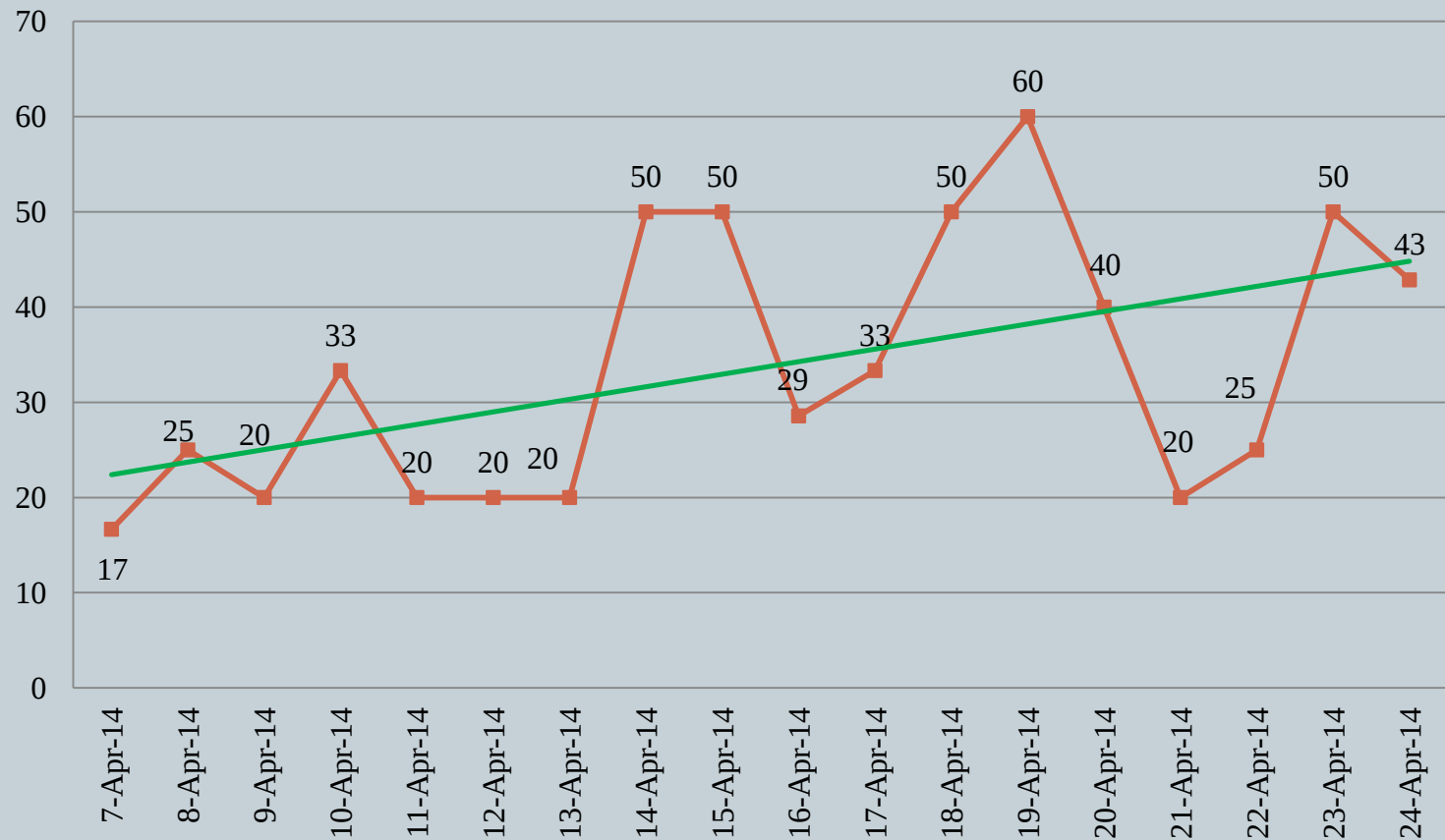
Comparison of Total Errors percentage



Analysis and Interpretation



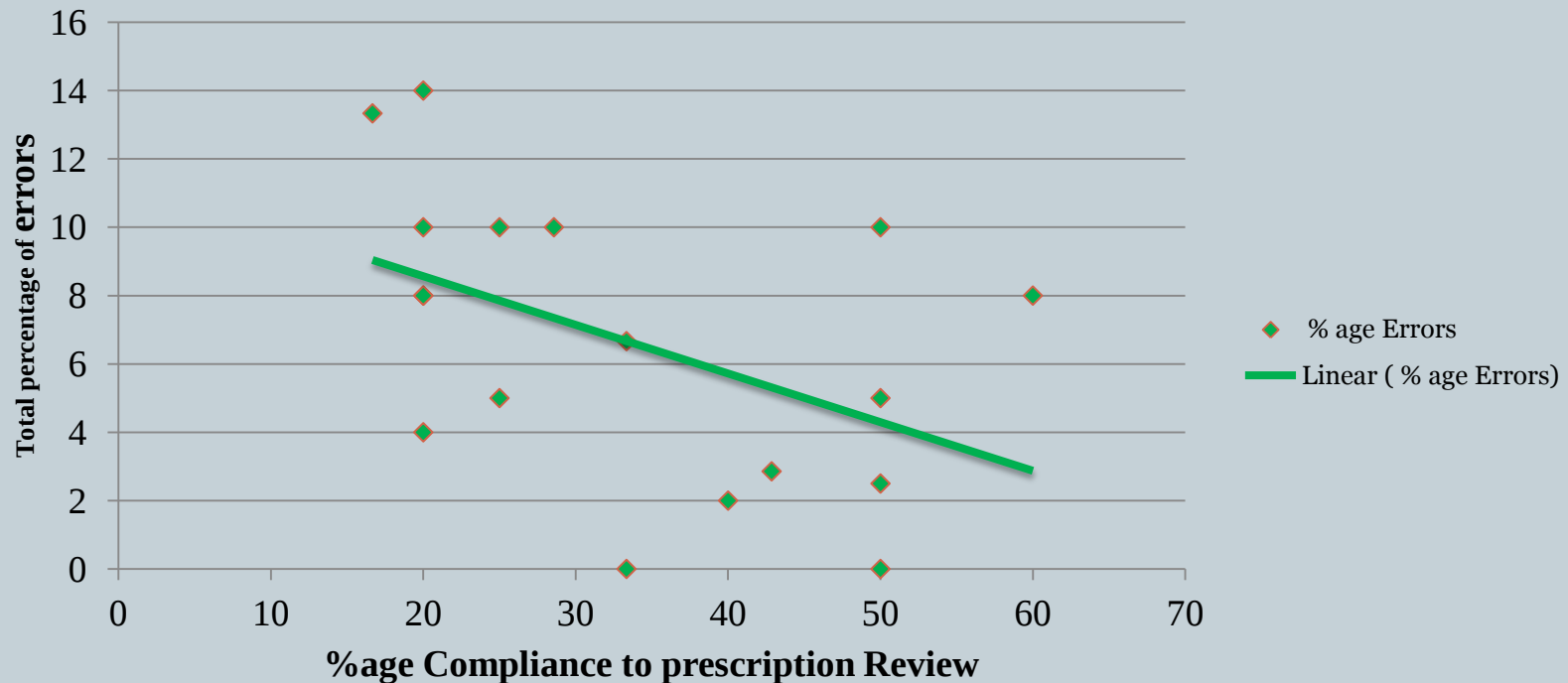
Percentage of of Prescriptions reviewed



Analysis and Interpretation



Relationship between Percentage compliance to Prescription Review and Total Error percentage



Analysis and Interpretation



- To see the relationship between Total percentage Error and Percentage Compliance to Prescription Review Correlation Coefficient was calculated which came out to be -0.456 which implies that the two variables have strong negative correlation. So this can be concluded that with increase in prescription Review compliance percentage the total error percentage decreases. The p value is 0.057 which implies that the relation is significant.

Suggestions



- Existing MAR sheet was edited. Initiation of use of edited MAR sheet will help in better documentation

[MAR.pdf](#)

[MAR \(edited\).pdf](#)

- Use of Hospital Information system

Sustainability



- Creation of Quality Indicator to monitor Prescription review
- Surprise audits by clinical pharmacologist
- Trainings for introduction in new departments specially of the residents should be done by already trained residents
- Interdepartmental comparisons of the indicators after spread to other departments

Challenges



- Reluctance of staff to participate in the process of prescription review.
- Assent of the consultants
- Proper documentation of the prescription review process
- The residents of the Internal Medicine department were on shift duty therefore several training sessions were conducted to train them all.



Limitations



- ❖ Lack of specified space in MAR sheet to document
 - the appropriateness of prescription
 - consultants' concern regarding the prescription
 - Signature of the consultant

- ❖ Prescription Review should ideally be done by the clinical pharmacologist

