The Best Practice Adopted to Mitigate Medication Errors

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CAHO

Committed to Safer Healthcare

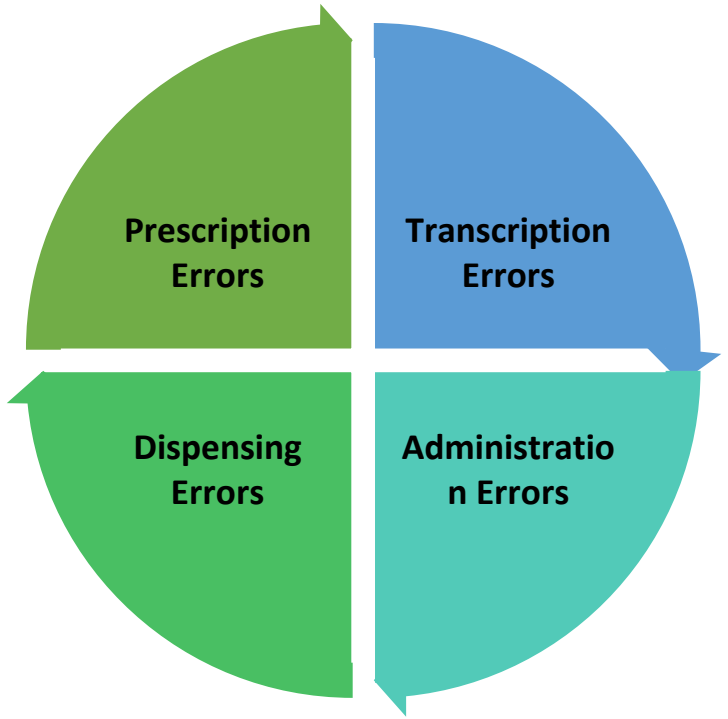
World Patient Safety Day 17 September

Introduction

Medication error is any preventable event that may cause or lead to inappropriate medication use or patient harm while medication is in the control of the health care professional, patient, or consumer.

Types of Medication Errors :

- Prescription errors
- Transcription errors
- Dispensing errors
- Administration errors



Problem Definition

The medication error rates in our hospital were high and we adopted different strategies. Though it showed a fall in error rates it was not sustainable. Hence it was essential to bring a sustainable and continuous error monitoring and capturing system .

Objective

To minimize overall medication error happening in ou hospital and make our facility a patient safe hospital.

Concept Note

For any system to be sustainable every one in the loop should have the feel that they are monitored at different levels.

Keeping the key point – patient safety in the center we structured an easily feasible system that will be sustainable and blame free.

We were able to bring down the error by adapting to our new system.

Methodology

Online reporting and yellow form system

From 1st of November 2021 a new system of reporting was adapted that was structured and framed by department of clinical pharmacology and Quality department.

The reporting system had 2 parts

1) An online link.
2) A yellow form.

Methodology (….Continued)

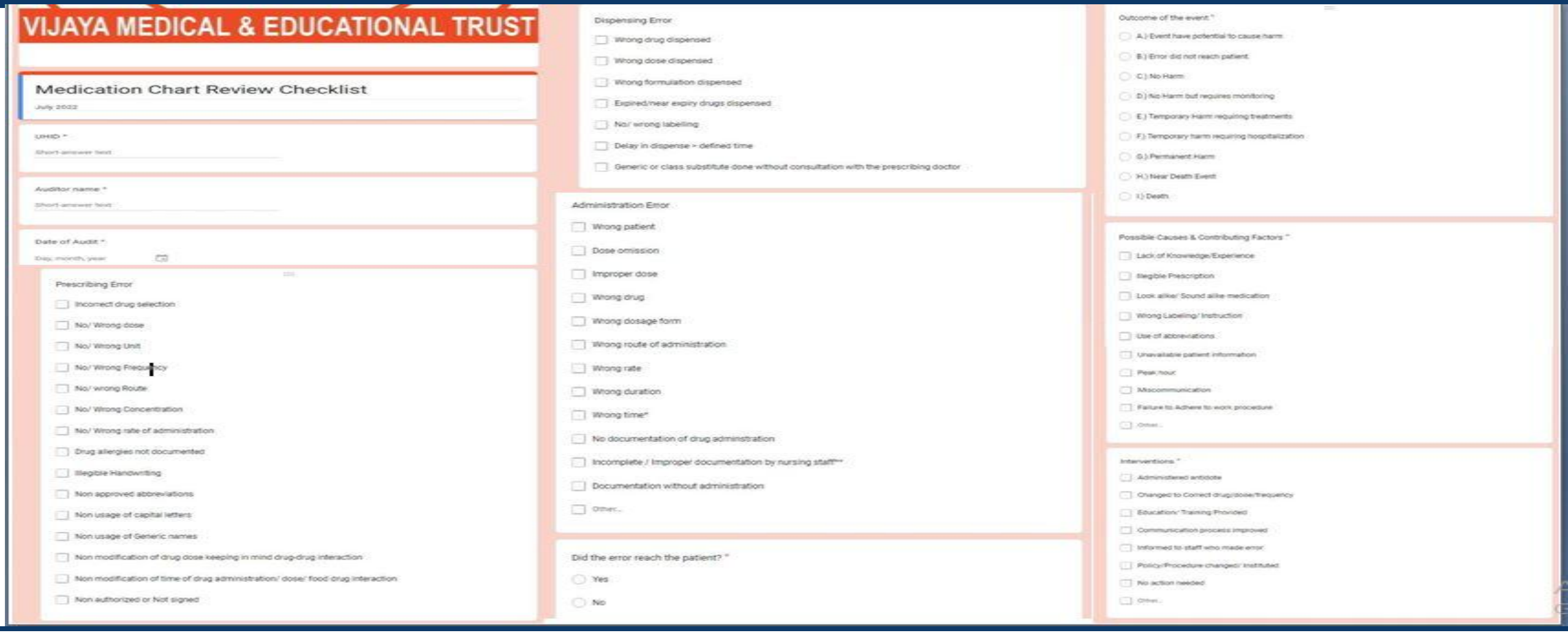
Online reporting

The online link had all possible medication errors mentioned on it so it can be easily opened and ticked and had an option to attach picture.

The link is being generated by the department of clinical pharmacology, and is circulated to everyone involved in patient care.

- Doctors including senior consultants.
- Nurses .
- Physician assistants.
- Pharmacist / Clinical Pharmacist
- Respiratory therapist and other paramedical staffs.

Methodology (….Continued)



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Medication Chart Review Checklist

July 2022

UHID *

Short-answer text

Auditor name *

Short-answer text

Date of Audit *

Day, month, year

Prescribing Error

- Incorrect drug selection
- No/ Wrong dose
- No/ Wrong Unit
- No/ Wrong Frequency
- No/ wrong Route
- No/ Wrong Concentration
- No/ Wrong rate of administration
- Drug allergies not documented
- Illegible Handwriting
- Non approved abbreviations
- Non usage of capital letters
- Non usage of Generic names
- Non modification of drug dose keeping in mind drug-drug interaction
- Non modification of time of drug administration/ dose/ food drug interaction
- Non authorized or Not signed

Dispensing Error

- Wrong drug dispensed
- Wrong dose dispensed
- Wrong formulation dispensed
- Expired/near expiry drugs dispensed
- No/ wrong labelling
- Delay in dispense > defined time
- Generic or class substitute done without consultation with the prescribing doctor

Administration Error

- Wrong patient
- Dose omission
- Improper dose
- Wrong drug
- Wrong dosage form
- Wrong route of administration
- Wrong rate
- Wrong duration
- Wrong time*
- No documentation of drug administration
- Incomplete / Improper documentation by nursing staff**
- Documentation without administration
- Other...

Did the error reach the patient? *

- Yes
- No

Outcome of the event *

- A.) Event have potential to cause harm
- B.) Error did not reach patient
- C.) No Harm
- D.) No Harm but requires monitoring
- E.) Temporary Harm requiring treatments
- F.) Temporary harm requiring hospitalization
- G.) Permanent Harm
- H.) Near Death Event
- I.) Death

Possible Causes & Contributing Factors *

- Lack of Knowledge/Experience
- Illegible Prescription
- Look alike/ Sound alike medication
- Wrong Labeling/ Instruction
- Use of abbreviations
- Unavailable patient information
- Peak hour
- Miscommunication
- Failure to Adhere to work procedure
- Other...

Interventions *

- Administered antidote
- Changed to Correct drug/dose/frequency
- Education/ Training Provided
- Communication process improved
- Informed to staff who made error
- Policy/Procedure changed/ instituted
- No action needed
- Other...

Methodology (….Continued)

Yellow Form Reporting

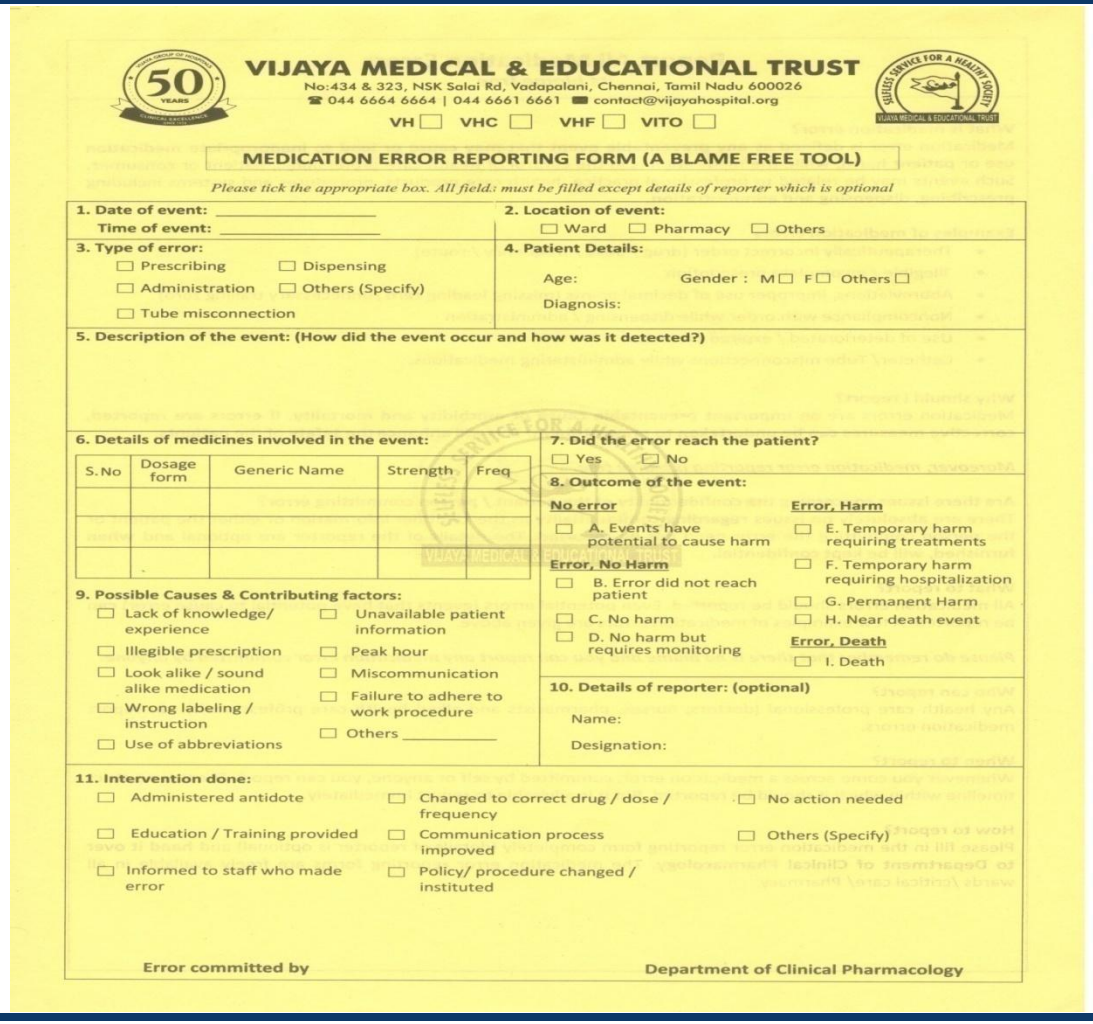
Which will be raised by the department of clinical pharmacology based on the link alert reaching the department.

The yellow form is vital in monitoring the safety of all healthcare products.

Reports can be made for suspected Adverse Drug Reactions (ADR's) to all medicines including

i. Vaccines
ii. Blood factors and Immunoglobulins
iii. All medical devices etc.,

Methodology (….Continued)



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MEDICATION ERROR REPORTING FORM (A BLAME FREE TOOL)

Please tick the appropriate box. All field: must be filled except details of reporter which is optional

1. Date of event: _____
Time of event: _____

2. Location of event:
☐ Ward ☐ Pharmacy ☐ Others

3. Type of error:
☐ Prescribing ☐ Dispensing
☐ Administration ☐ Others (Specify)
☐ Tube misconnection

4. Patient Details:
Age: Gender : M☐ F☐ Others ☐
Diagnosis:

5. Description of the event: (How did the event occur and how was it detected?)

6. Details of medicines involved in the event:

S.No	Dosage form	Generic Name	Strength	Freq

7. Did the error reach the patient?
☐ Yes ☐ No

8. Outcome of the event:

No error
☐ A. Events have potential to cause harm

Error, No Harm
☐ B. Error did not reach patient
☐ C. No harm
☐ D. No harm but requires monitoring

Error, Harm
☐ E. Temporary harm requiring treatments
☐ F. Temporary harm requiring hospitalization
☐ G. Permanent Harm
☐ H. Near death event

Error, Death
☐ I. Death

9. Possible Causes & Contributing factors:
☐ Lack of knowledge/ experience
☐ Illegible prescription
☐ Look alike / sound alike medication
☐ Wrong labeling / instruction
☐ Use of abbreviations
☐ Unavailable patient information
☐ Peak hour
☐ Miscommunication
☐ Failure to adhere to work procedure
☐ Others _____

10. Details of reporter: (optional)
Name:
Designation:

11. Intervention done:
☐ Administered antidote
☐ Education / Training provided
☐ Informed to staff who made error
☐ Changed to correct drug / dose / frequency
☐ Communication process improved
☐ Policy/ procedure changed / instituted
☐ No action needed
☐ Others (Specify)

Error committed by **Department of Clinical Pharmacology**

Report All Medication Errors
Its blame free

What is medication error?
Medication error is defined as **any preventable event** that **may cause or lead to inappropriate medication use** or **patient harm**, while the medication is in the control of health care professional, patient or consumer. Such events may be related to professional practice, health care products, procedures and systems including **prescribing, dispensing and administration**.

Examples of medication errors
- Therapeutically incorrect order (drug / dose / frequency / route)
- Illegible / incomplete prescription
- Abbreviations, improper use of decimal points (missing leading zero /unnecessary trailing zero)
- Noncompliance with order while dispensing / administration
- Use of deteriorated / expired products
- Catheter/ Tube misconnections while administering medications.

Why should I report?
Medication errors are an **important preventable cause of morbidity and mortality**. If **errors are reported, corrective measures can be undertaken to prevent them**. This will **enhance** the **safety** of the **patients**.

Moreover, medication error reporting is blame free.

Are there issues concerning the confidentiality of the patient / person committing error?
There are **absolutely no issues regarding confidentiality** as the identifier information or either the patient or the person committing the error need not be reported. The details of the reporter are optional and **when furnished, will be kept confidential.**

What to report?
All medication errors should be reported. Even potential errors (events that have potential to cause error) can be reported. A few examples of medication errors are given above.

Please do remember that there is no blame and you can report any medication error committed by anyone.

Who can report?
Any health care professional (doctors, nurses, pharmacists and allied health care professionals) can report medication errors.

When to report?
Whenever you come across a medication error, committed by self or anyone, you can report. There is no strict timeline within which it should be reported. But it is advisable to report immediately.

How to report?
Please fill in the medication error reporting form completely (details of reporter is optional) and **hand it over to Department of Clinical Pharmacology**. The medication error reporting forms are freely available in all wards /critical care/ Pharmacy.

Methodology (….Continued)

- When any of the health care worker come across any type of medication errors or tubing misconnections they can open the link and enter the error immediately.
- Whenever possible we advice them to attach a picture along.
- The error will be notified immediately in the backend and the department will analyze the error.
- The department will raise yellow form on the individual who have committed the error.
- The clinical pharmacology team will educate the individual on the seriousness and get his initials on the form.
- If any health care worker commit an error for 3 times or more they will be made to attend a training session on safe medication practices (happening every month for all new employees).

Notes:

- ✓ All the errors will be closed and rectified in maximum 2 hours time.
- ✓ Serious errors will be addressed at the point of generation of link.

Dispensing errors for example

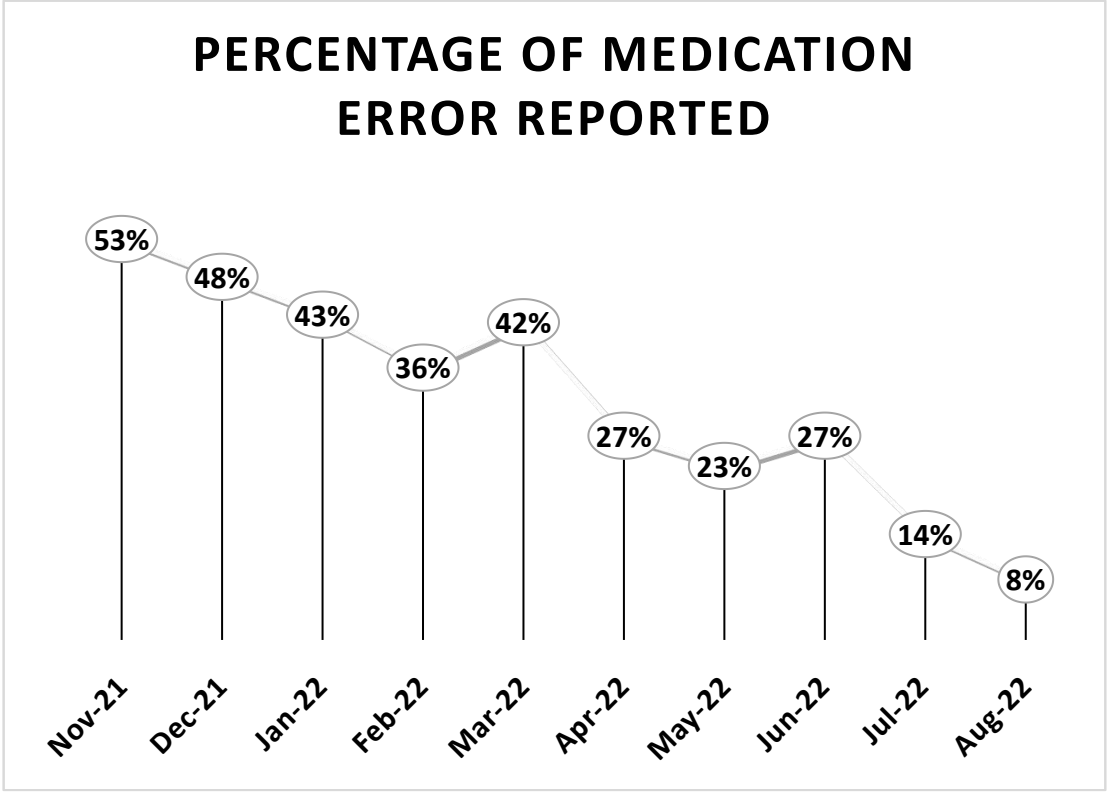
- ✓ Failure in maintenance of cold chain while transferring drug from pharmacy to ward or while returning it from ward to pharmacy will be discarded and the staff involved will be paying the compensation for the loss.

Tangible Results

The reporter stays anonymous. Only the backend team knows about the reporter.

The healthcare workers are aware that they are monitored at different levels pertaining to drug safety hence they are careful right from prescribing, dispensing, administering to monitoring the patient. At the level of pharmacy and wards every one is cautious on drug storage too.

Our medication error rates declined from 53% to 8% over a period of 9 months and the decline is sustained.



Intangible Results

- All the healthcare workers across the hospital involved in patient care is aware of the medication errors and it's consequences.
- This awareness of the existing mechanism have directly given an emphasis on medication safety aspect and we have imbibed it as a part of our culture.

Educating on Medication Errors

Conclusion

- ✓ We find this system highly effective and easily adoptable in any hospital as a patient safety initiative and the tool is blame free and efficient.
- ✓ This helps in providing an impact on quality care of the patient.
- ✓ Improves public health.

Acknowledgment

We would like to thank the management, Quality Department The Department of Clinical Pharmacology and IT team for putting forward the new ideas that helps in improving the patient Safety.

Any Questions

Thank You!