

TITLE: A quality improvement project on medication reconciliation at the time of admission to improve patient safety and Care.

Medical Reconciliation are an essential aspect of patient care done healthcare professionals with patients to ensure accurate and complete medication information transfer at interfaces of care. The WHO High5s medication reconciliation SOP applies to the acute hospital setting. It covers implementing medication reconciliation on admission, at internal transfer and on discharge from hospital. Adverse drug events (ADE) are a leading cause of injury and death within health care systems around the world. Around half of the medication errors that occur in hospital are estimated to occur on admission or discharge from a clinical unit or hospital⁴ and around 30% of these errors have the potential to cause patient harm. These errors can occur when obtaining the patient's medication history (e.g. on admission to hospital), when recording the medicines in the medical record, and when prescribing medicines on admission, on transfer to another ward and at discharge.

The medication reconciliation process is a multidisciplinary activity with responsibilities shared among physicians, nurses, pharmacists, and other clinicians involved in the patient's care. The culture of the organization with respect to interdisciplinary collaboration and teamwork will significantly influence the effectiveness of the medication reconciliation process.

MEDICATION RECONCILIATION



Up to 67% of patient's prescription have one or more errors.

RESEARCH QUESTION:

To evaluate and enhance the accuracy, efficiency and effectiveness of the medication reconciliation process during patient admission by minimize medication error to ensure the continuity of care without any discrepancies to improve the patient care and outcome.

OBJECTIVES: The Objectives are :-

- To evaluate the medical reconciliation process at the time of admission to enhance the accuracy, efficiency and effectiveness of the medical reconciliation process.
- To identify areas for improvement in the medical reconciliation process.
- Do a root-cause analysis of the cause of incompleteness of medical reconciliation at the time of admission.
- To recommend and implement measures to complete the medical reconciliation process at the time of admissions.

MATERIAL AND METHODS:

STUDY DESIGN: Retrospective Observational Study

STUDY SAMPLE: 249

STUDY SETTING: Max Healthcare, Saket, Delhi

SETTING: Max Healthcare Institute Limited Located in the heart of south Delhi, the 530+ bed Max Super Specialty Hospital, Saket, is widely considered as one of the best hospitals in the country. Split into two blocks - East Block (a unit of Devki Devi Foundation) and West Block (a unit of MHIL - Max Healthcare Institute Limited), it has a complete spectrum of diagnostic and therapeutic technologies, including several which are a First in India and Asia.

Experts at Max Super Speciality Hospital, Saket, have treated more than 34 lakh patients across 38 specialities combined in the East and West wings.

The hospital has received NABH, JCI and ISO accreditation for providing the highest quality of patient safety and care.

STUDY POPULATION

- **Inclusion criteria:** Include the different specialties like nephrology, Cardiology, Neurology, Urology etc.
- **Exclusion criteria**
Patients at the transfer to Ward/ICU
Patients at the time of Discharge
- **Study tools:** CPRS Software, Excel

DURATION OF STUDY: 3 months (28 March – 28 June)

SAMPLING TECHNIQUE: Simple Random Sampling

DATA COLLECTION PROCEDURE: The Data is collected with the help of using CPRS Software (Computerized Patient Record System).

2. **DATA ANALYSIS PLAN:** The Data will analyze with the help of excel.
3. **ETHICAL CONSIDERATIONS:** As the Data was collected with the help of CPRS so Informed Consent was not required.
4. **IMPLICATIONS OF RESEARCH:**
The study will give a comprehensive understanding of the medical reconciliation process for inpatients. This include analyze the medical reconciliation process by identifying the factors contributing to incompleteness of medical reconciliation process Ultimately the research will provide the valuable insights and recommendations aimed to complete medical reconciliation process for inpatients to improve patient safety and care and also improving the efficiency of healthcare system.
5. **REFERENCES:** Irwin, Vanessa Ann “Admission Medication Reconciliation Process Admission to Improve Patient Outcomes” Fresno and San José State University, Springer:2015.

Appendix A Research matrix

Research matrix example. The overall objective of a research project was to contribute towards an understanding of medical reconciliation process at the time of admission through a study of medical reconciliation process in different specialties (Max Healthcare) to improve patient safety and care.

Research Question/Specific Objective	Data required	Data Collection Method	Quality Improvement Tools	Data analysis

APPENDIX B Data Collection Instrument

Data Collection – done by preparing an medical reconciliation checklist which have all the parameters in medical reconciliation process and also collected with the help of CPRS Software – Computerized Patients Record System – an electronic health information system.

