

MEDICATION RECONCILIATION OUTCOMES WITH DIGITAL SUPPORT (PHARMS): EVIDENCE FROM 2025 AT A TERTIARY HOSPITAL

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Background and Importance

Medication reconciliation (MR) is a key patient-safety intervention designed to prevent medication discrepancies at transitions of care. Digital support tools may improve MR efficiency and consistency by accelerating medication-list comparisons and enabling timely pharmacist action. This poster reports real-world outcomes of MR supported by the PharMS digital system over a full fiscal year.

Aim: To evaluate MR outcomes with digital support (PharMS) in a tertiary hospital during Oct 2024–Sep 2025, focusing on timeliness, efficiency, discrepancy detection, and patient-safety impact.

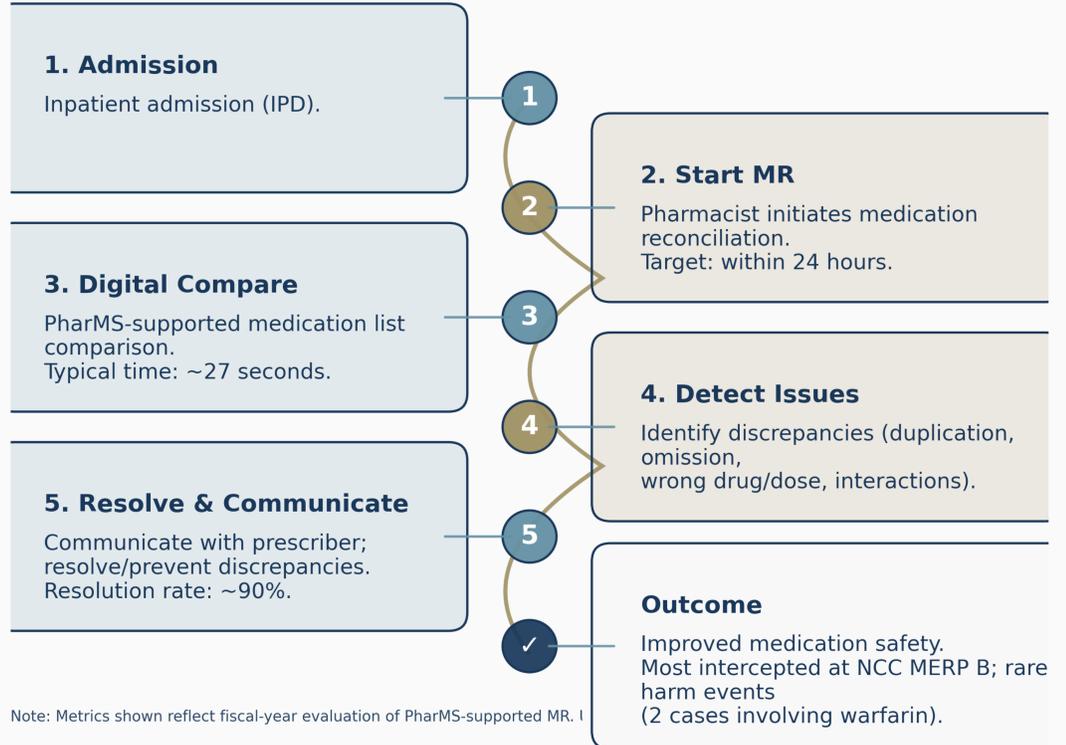
Materials and Methods

- **Study design:** Retrospective observational evaluation.
- **Setting:** A tertiary hospital (inpatient services).
- **Study period:** Oct 2024–Sep 2025 (full fiscal year).
- **Population:** All inpatients who underwent MR during the study period.
- **Primary outcome:** MR completion within 24 hours after admission.
- **Secondary outcomes:**
 - Mean MR completion time (minutes).
 - Time required for the digital comparison step (seconds).
 - Number and types of discrepancies detected.
 - Resolution/prevention rate of discrepancies; severity categories (NCC MERP).
- **Analysis:** Descriptive statistics (including 95% CI where applicable) and comparison with prior-year performance where relevant.

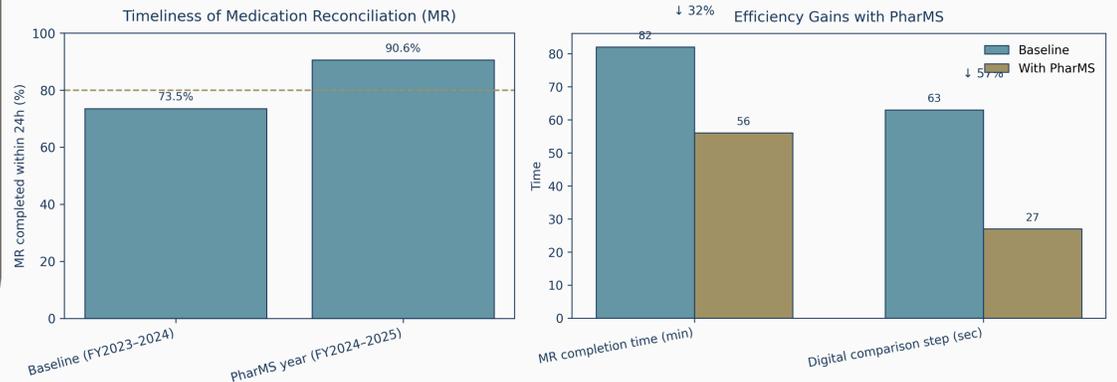
Results: Key outcomes

- **Timeliness:** 90.6% of patients (16,551/18,288) received MR within 24 hours, exceeding the 80% target. Average MR completion time is 56 minutes, while PharMS-assisted digital comparison takes 27 seconds.
- **Discrepancies:** Pharmacists identified 120 discrepancies, mainly duplication (40.7%) and omission (37.0%).

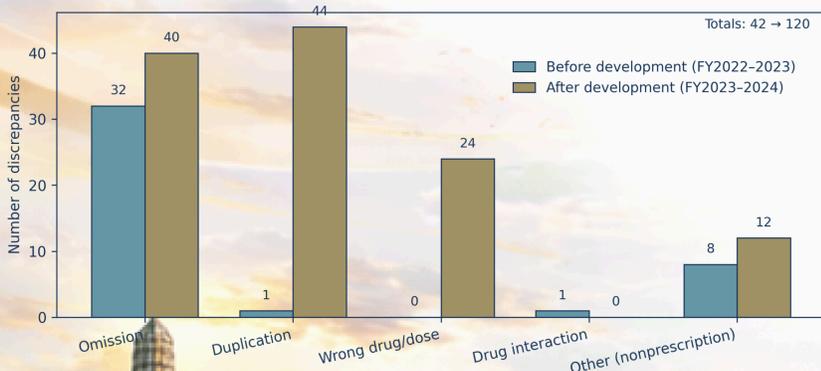
Workflow: Medication Reconciliation (MR) with PharMS Digital Support



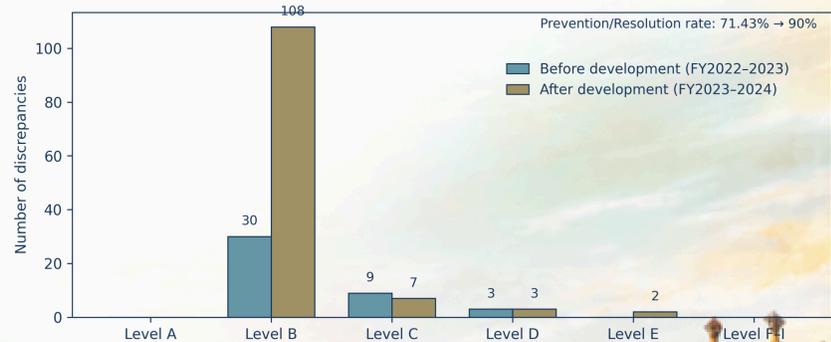
Note: Metrics shown reflect fiscal-year evaluation of PharMS-supported MR.



Discrepancy Types Detected via Medication Reconciliation (Before vs After Development)



Severity of Discrepancies (NCC MERP) (Before vs After Development)



Conclusion and Relevance

PharMS-supported medication reconciliation achieved high timeliness (90.6% within 24 hours) and exceeded the institutional target. Digital support was associated with substantial efficiency gains, reducing both MR completion time and the medication-list comparison step. The system helped identify clinically relevant discrepancies (mainly duplication and omission) and enabled a high rate of prevention/resolution (90%), with rare harm events observed. These findings support the value of integrating digital tools into MR workflows to strengthen inpatient medication safety.