

Pharmacy-Related Quality Improvement Projects in Singapore



RESOLUTION OF MEDICATION-RELATED PROBLEMS FOR PATIENTS ON TRANSITION OF CARE FROM HOSPITAL TO PRIMARY CARE; AND REDUCTION OF PRESCRIBING NEAR-MISSES THROUGH MEDICATION CLINIC IN TOA PAYOH POLYCLINIC



INTRODUCTION



Discharged from hospital



Polyclinic consultation

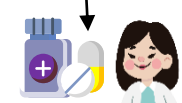


Pharmacy

Patient highlights issues



Pharmacist and Doctor Interventions



Pharmacy reprocesses Rx



MRPs detected after doctor's consultation → interventions downstream → interruptions to existing consultations → **further prescribing errors**



Post-consultation interventions incurred unnecessary wait time for patients
Unnecessary wait time incurred
Mean minimum = **12:06min**
Mean maximum = **18:26min**



37% of near misses were resolved at the pharmacy → potential cost-avoidance of **\$225,348.50!**

- **57.5%** of patients transiting from hospitals to primary care had medication-related problems (MRPs)
- **79.3%** had low to medium adherence to their medications

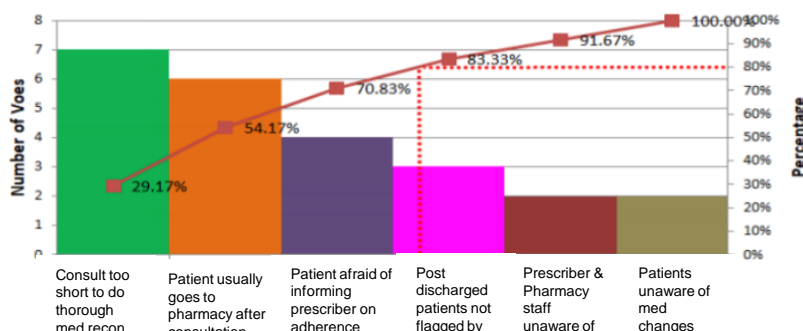
Objective: To identify and resolve 100% of medication-related problems not due to adherence on transition to primary care and to reduce prescribing near-misses by 50% within 3 months

ANALYSIS OF PROBLEM

The study team took a vote to determine which issues to tackle and 3 main issues were highlighted:

1. Doctor's consultation **too short** for thorough medication reconciliation (MR)
2. Patient usually visits pharmacy **after the doctor's consultation**
3. Patient is **afraid to inform doctor** of problems with medication adherence

Root causes for unidentified MRPs leading to Medication Errors



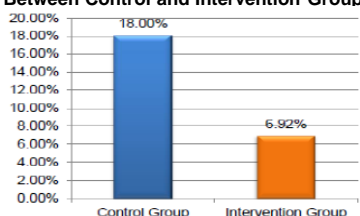
INTERVENTIONS



Problem	Doctor's consultation too short for thorough MR	Patient usually visits pharmacy <i>after</i> the doctor's consultation	Patient is afraid to inform doctor of problems with medication adherence
Intervention (Medication Clinic implemented on 1 st Dec '17)	Pharmacist to perform MR	MR to be performed <i>prior</i> to seeing doctor	Pharmacist to assess adherence and check supply balance as a marker of compliance during MR

IMPACT

Comparison of Prescribing Errors Rate Between Control and Intervention Group

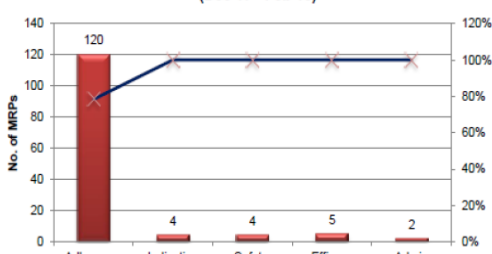


Prescribing errors were reduced from **18.0%** (n = 50, control group) to **6.9%** (n = 130, intervention group)

Challenges:

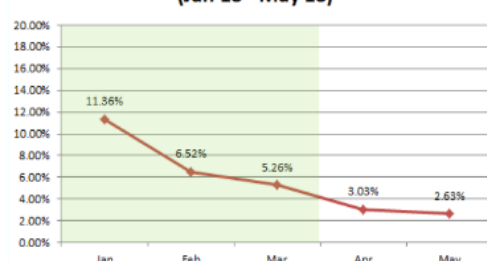
Manual recording of MRPs → time consuming and tedious
No single source of truth → difficult for pharmacist to reconcile medication records
Adherence-related MRPs → difficult to be resolved within the same visit
Discharged patients who were not referred to NHGP via contact centre appointment booking email workflow → missed from paired medication clinic consultation service

Types of Medication Related Problems (MRPs) (TOA) (Dec 17 - Feb 18)



Non adherence-related MRPs: **100%** resolution
Adherence-related MRPs: **80.74%** resolution

% of Patients with Prescribing Near Misses (Jan 18 - May 18)



76.8% reduction in prescribing near-misses → better quality prescriptions and safer patient care

Estimated Total Potential Cost Savings = USD 632,475.00 ≈ SGD 822,217.50 !



Presented by:
PSS Hospital Chapter