

Mission Statement

In June 2014, Clementi Polyclinic Pharmacy embarked on a project to reduce the number of returned medications. A series of counter-measures were implemented to address the identified root causes.

The number of returned chronic medication was decreased by 42.7%. Productivity and staff satisfaction also improved since the implementation of the countermeasures. Hence, these proven countermeasures were made permanent in Clementi Polyclinic Pharmacy.

For this sustainability project, we aim to ensure the adherence to the countermeasures and further improvements with new targeted measures.

Team Members

Name	Designation	Department
Toh Hui Ping	Pharmacy Technician	NHG Pharmacy
Siti Nurhidayah	Pharmacy Technician	

Evidence for a Problem worth solving

- Risk of medication errors occurring when item is returned to the wrong bin and picked subsequently.
- Waste of time and resources:

Number of items rejected	113 per 10,000 line items
Time to sort rejected medications into Zone Baskets	5 minutes x 2 times a day = 10min/day
Time to return rejected medications from Zone Baskets to respective drug bins	5 minutes x 8 zones x 2 times a day = 80 minutes/day
Total time to return rejected meds/day	90 minutes/day*

*This excludes:

- Time incurred for rework of prescription after patient decides not to take the prepared supply.
- Waste of packing materials such as ziplock bags, labels and print cartridge. (Approx ~\$394/yr)

Flow Chart of Process

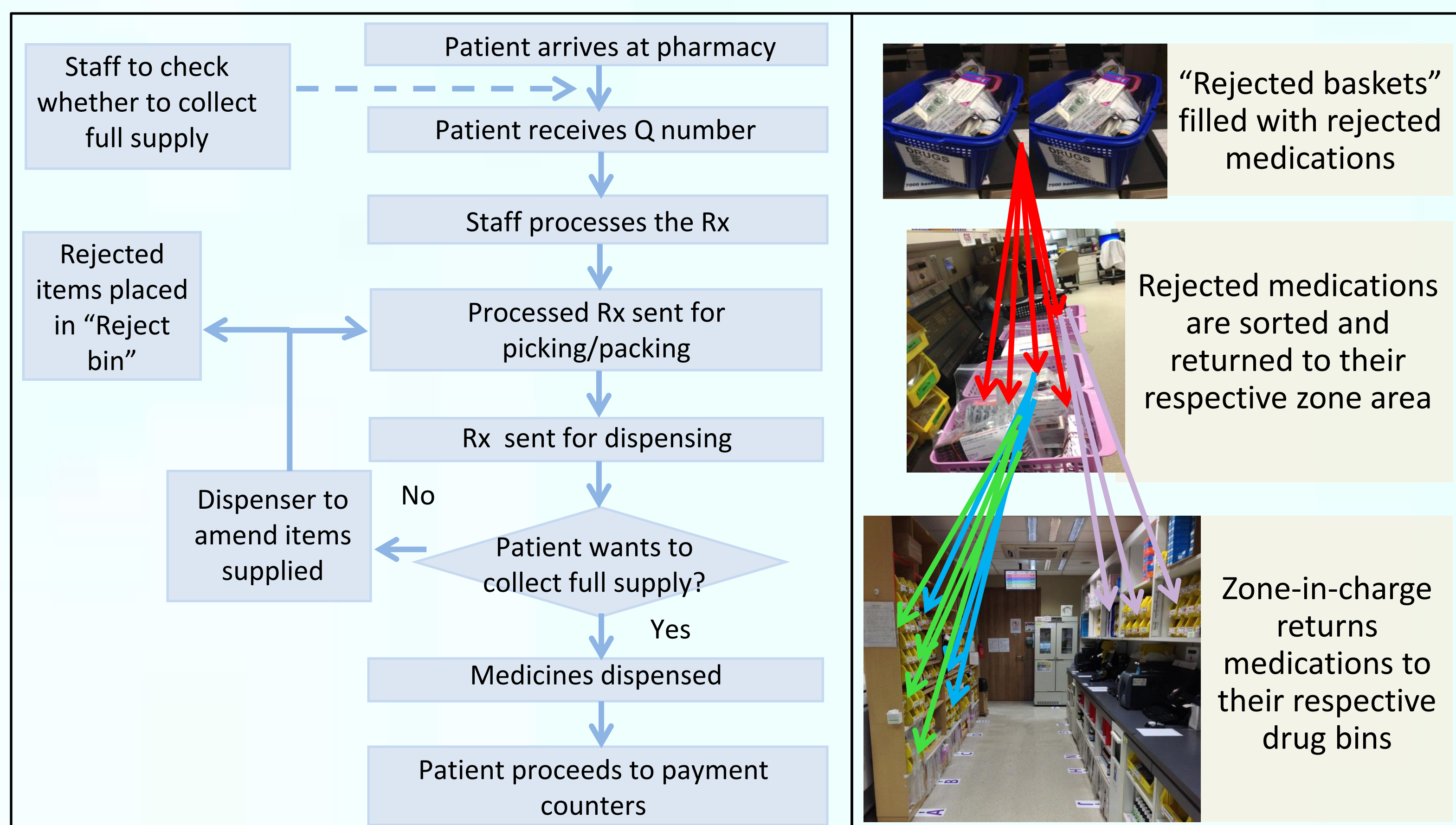
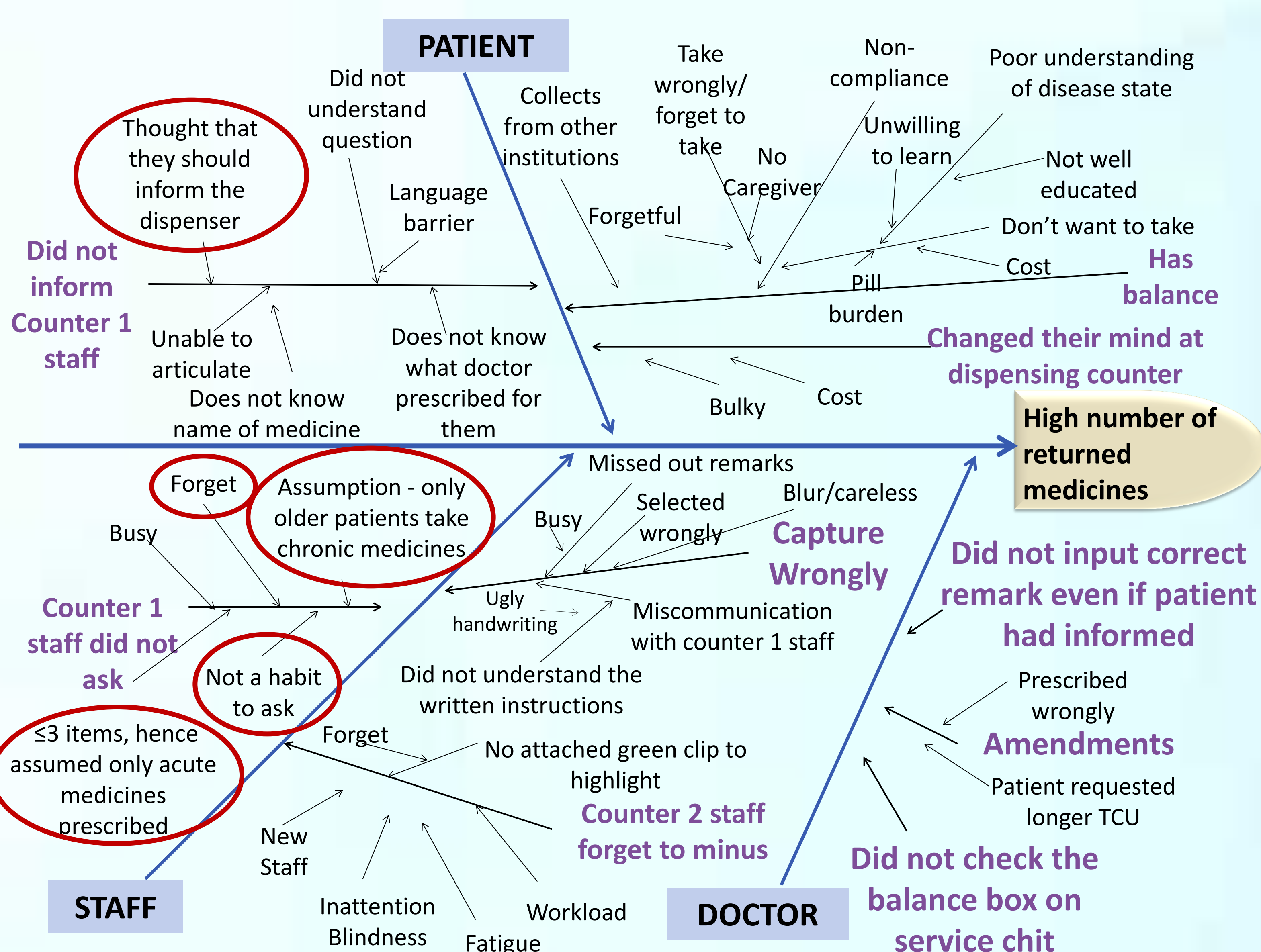


Figure 1 (Left): Current workflow for supply of medications to patient

Figure 2 (Right): Steps in returning rejected medications back to their respective drug bins

Cause and Effect Diagram



Interventions

A series of interventions were carried out in Clementi Polyclinic Pharmacy and continuous review and improvement was carried out to refine the interventions.

Intervention 1: GTN not supplied

GTN has one of the highest rate of returns, since many patients has an unopened standby bottle at home. The dispenser would check with the patient whether they need any GTN at the point of dispensing instead of default supply.

Intervention 2: Checking for Balance Medications at first point of contact

Reception counter staff to check with all patients whether they have any balance medications and to highlight to them that wait time will be longer if changes are inform only at dispensing point.

This prevents rework and educates patients about the extra time and effort spent on reworks.

Intervention 3: Medication Balance Form

A "medication balance form" is given to patients collecting partial supplies. The patients fill up the form and passes it to the reception counter staff during their next visit and staff will deduct the supply accordingly.

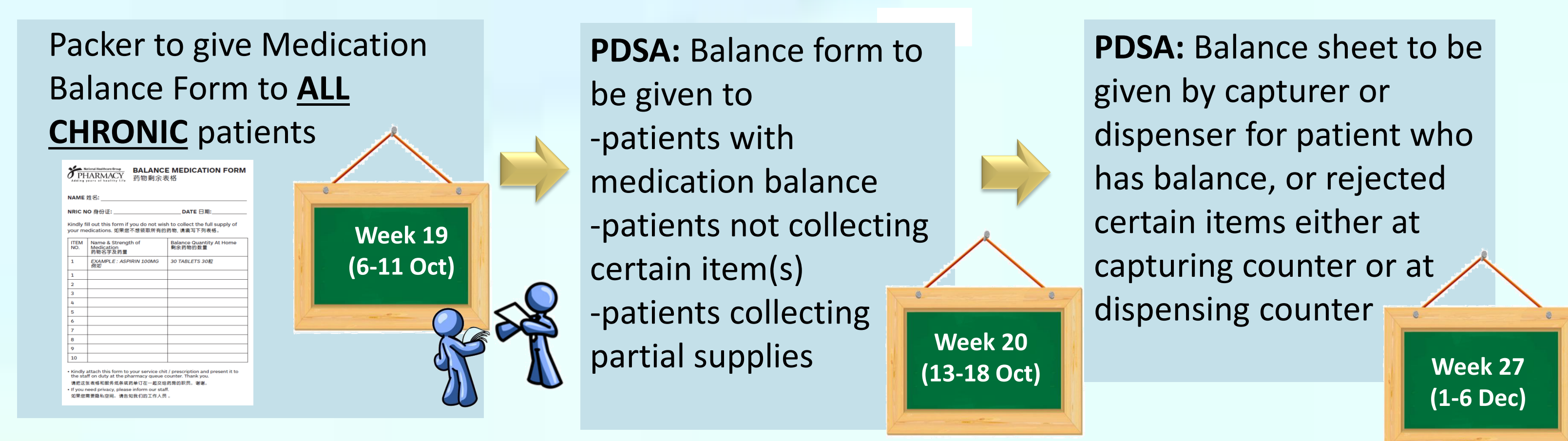


Figure 3 (Above): PDSA for medication balance form intervention

Intervention 4: Reconcile Next Time

When patients inform dispenser about balance medication at the point of dispensing, the dispenser would suggest reconciliation at the next visit to prevent rework. Dispenser also supplies patient with medication balance form and informs patient to inform reception counter staff of their balance in future.

New Interventions-March 2016 till present

- New reception counter workflow
 - New workflow of checking through patient's prescription and if possible confirming the prescription followed by the issuing of queue ticket. Reception staff can check with patient directly whether they want to collect full supply of each medication.
- OPAS implemented in Clementi
 - Tedious workflow on returning of medications encourages reception staff to actively ask patient on balance medication and dispensing staff to educate patients on balance medication
- Relocation of medication balance form
 - The forms were moved from drawers to dispensing counter tops making it more visible and accessible to dispensers. More forms were issued.

Results

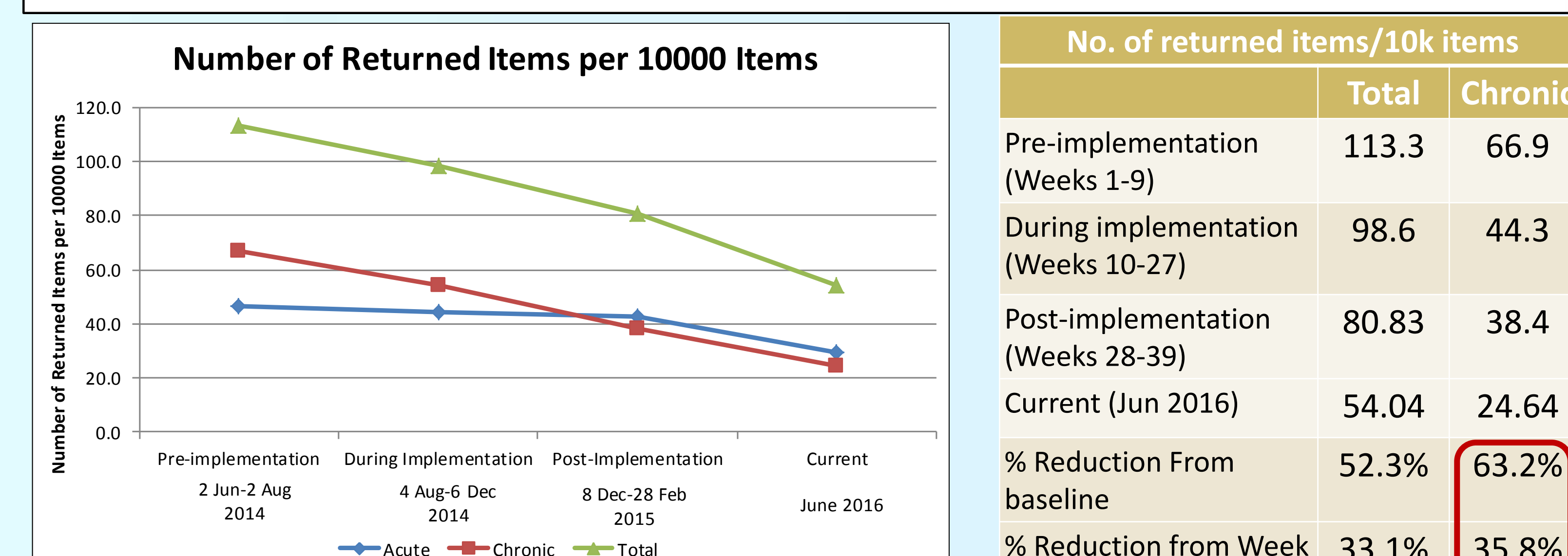
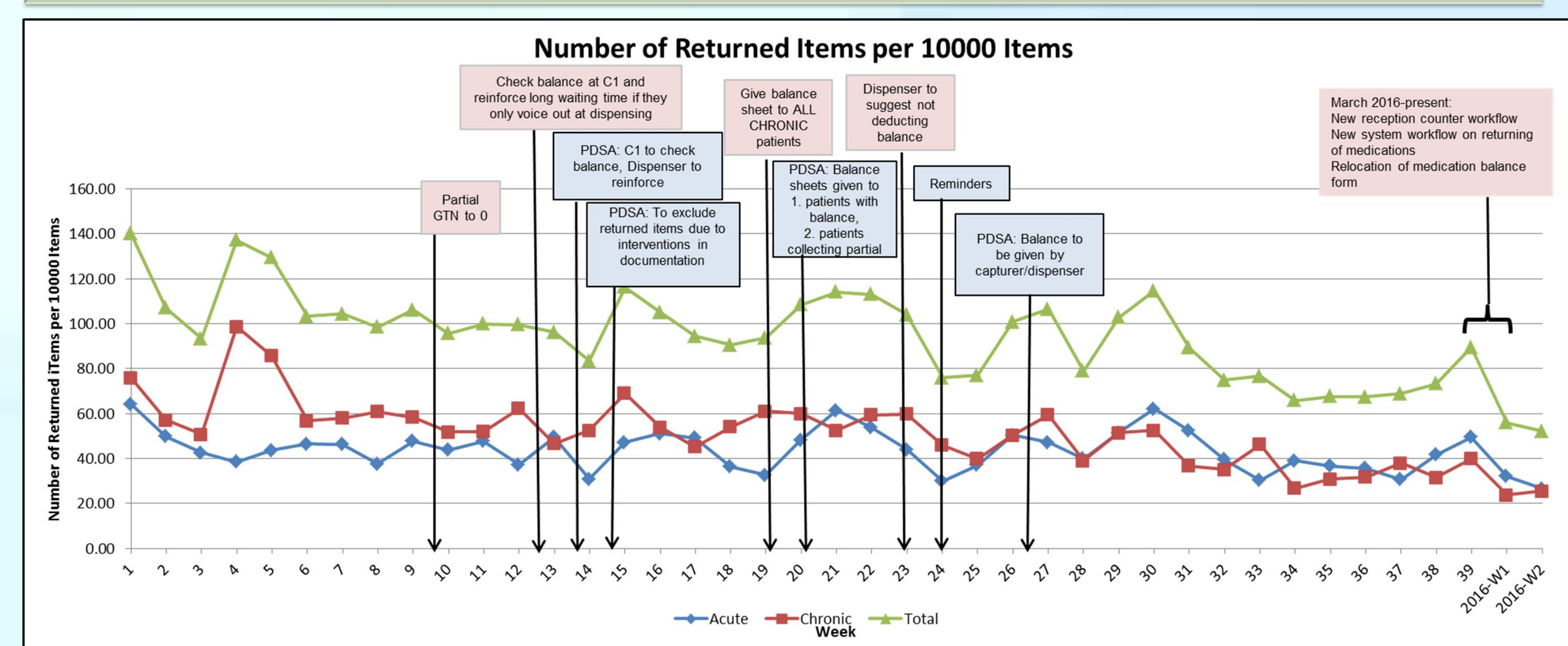


Figure 4: Overview of returned items from Jun 14 to Jun 16

Strategies to Sustain

- Continual patient education and empowerment to help them better manage their medications.
- Processes reviewed and analysed at regular intervals and continuous improvements to further improve the process.