



Fully utilize Gastroscopy and Colonoscopy endoscopic procedure kit – Sustainability

Problem Statement

Existing Procedure Kits are not used efficiently during Gastroscopy and Colonoscopy procedure, using 2 kits and having an excess of unused items.

Significance of the Issue

Underutilization of endoscopy procedure kit may lead to high wastage, inventory reduction and reduce workflow efficiency

Unintended Ramifications & Challenges

There is no extra buffer on any of the items in the new improvised endoscopic procedure kit if the item becomes unusable due to reasons such as contamination.

Pre-Intervention Landscape

Quantifying Concerns : Metrics & Data Analysis

- ❖ Geographical location consideration : Endoscopy Centre
- ❖ Time period analysis : 6 months
- ❖ Sample size impact assessment : Number of patient for G/C
- ❖ Numerator : Number of discarded items & Patient's healthcare cost
- ❖ Target (state reference for benchmark) : Fully utilized G/C endoscopic procedure kit, zero wastage. Reduce healthcare costs.

Number of unused items discarded

April 23 (710 Patients) 8 unused items x 710 patients = 5680 items discarded

May 23 (625 Patients) 8 unused items x 625 patients = 5000 items discarded

Tools

Number of patient coming for both G/C procedures & total cost of kit charged.



PDSA Cycle	Cycle 1	Cycle 2	Cycle 3
PLAN	Work with vendor to customise a new kit that will reduce wastage of unnecessary items	Smooth workflow and no wastage from new kit	Work with vendor to improvise and finalize the new kit
DO	Vendor returned with the customised new kit	Adjust small changes to daily workflow based on the feedback collected from staff	Vendor return with the finalized new kit and invoice
STUDY	Put the new kits into test	Put modified new kit to test	Fully put kit in daily work routine
ACT	Gather feedback from staffs regarding of the new kit	Implement new kits into daily routine and consistently gather feedback form staff.	Educate all staff and adopt the new changes

Post-Intervention Landscape

Improved Workflow Analysis (Post-Intervention)

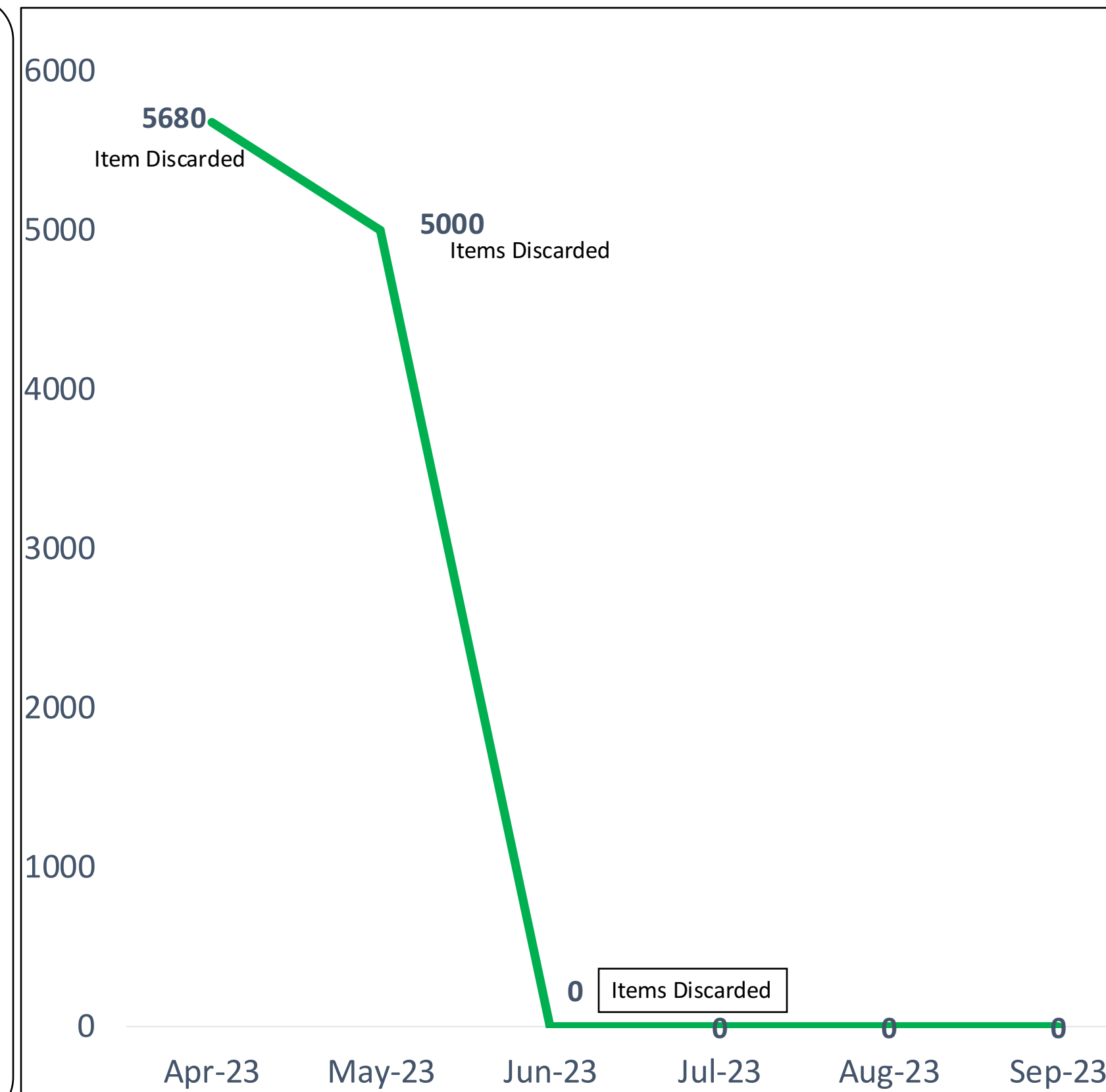


New Endoscopic procedure kit

Quantifying Solution : Metrics & Data Analysis

- ❖ Geographical location consideration : Endoscopy Center
- ❖ Time period analysis : 6 months
- ❖ Sample size impact assessment : Number of patient for G/C
- ❖ Numerator : Number of discarded items & Patient's healthcare cost
- ❖ Target (state reference for benchmark) : Fully utilized G/C endoscopic procedure kit, zero wastage. Reduce healthcare costs.

Number of unused items discarded



Number of patient coming for both G/C procedures & total cost of kit charged.



Quantifiable Projected Yearly Benefits

- ❖ Cost reduction to patient
- ❖ Smooth workflow to the staff
- ❖ Inventory space reduction to the department/organization
- ❖ Lowering carbon footprint

Sustainability

- ❖ Conducting staff periodic checks for using the customised procedure kit constantly.
- ❖ Ultimately, the goal is to create a sustainable model for procedure kit management that can be replicated in other departments or facilities.
- ❖ Leading to broader organizational improvements in resource utilization and patient care standards.