

The Challenge

Inventory management in this large Pharmacy Department had many opportunities for improvement. The process was unreliable and inconsistent. There were numerous undocumented processes and procedures with tremendous variability. The replenishment system lacked definition and consistency plus it was a manual process that was extremely time consuming. Stock outs were common and resulted in having to borrow from other pharmacies.

Targets

A Rapid Process Improvement (RPI) workshop was conducted with a 14-member Team. The Team was asked to accomplish the following targets:

- Establish standard work for Receiving, Reordering, Return, Lend & Borrow processes
- Determine uniform placement of barcodes (including Pyxis, wholesaler, Materials Management)
- Establish replenishment system with reordering triggers & par levels (incorporating disaster plan requirements)
- Establish system for managing inventory of "No-use to High-use" drugs for targeted diseases
- Establish clearly defined roles and responsibilities for inventory management
- Reduce reordering time by 25%
- Decrease cost of inventory on hand by 10%
- Increase inventory turns

Before

Issue Description: Couldn't tell which items were already on order



After

Post Improvement Benefits: Card placed in bins for "On order" and "Back ordered"; Communication Board for "On Order for Next Delivery" and "Low use to High use" Meds.



Areas of Focus

The workshop focused on the following boundaries:

Starting Point- Reorder needed/ trigger

Ending Point- Restocked

Workshop Actions

- Eliminated a person needing to check all deliveries
- Implemented a scanner
- Created innovative Kanban/ flipper system
- Improved reordering process
- Standardized work for each process
- Developed cross department cooperation- lab, MM, Pharmacy, Wholesaler, IT
- Received amazing vendor involvement- Hands on team members
- Identified "black hole" processes
- Created a system that can be easily replicated at other campuses
- Eliminated waste – time, travel, inventory
- Identified potential stock out items

Results

**Pharm. Inventory Management: Reordering Process RPI –
Process Data Worksheet – REORDER and RECEIVING**

Value-Added Analysis	Measure	Before	Vision	Day 5
	NUMBER OF STEPS	12+7= 19	6+7=13	6+7=13
	LEAD TIME	1 day (non-back ordered items)	1 day	1 day
	CYCLE TIME	86 min per day		28 min per day
	NUMBER OF CHECKING STEPS	4+2=6	3+2=5	3+1=4
	NUMBER OF WORK IN PROCESS	14+1=15	+1=	15+1=16
	TRAVEL DISTANCE (STAFF) [ANNUALIZED]	920 steps/year		460 steps/year

**Pharm. Inventory Management: Reordering Process RPI –
Process Data Worksheet- RETURN**

Value-Added Analysis	Measure	Before	Vision	Day 5
	NUMBER OF STEPS	18	11	17
	LEAD TIME	7 days to 1 year	5 days	6 days
	NUMBER OF QUEUES	3	2	2