

National Quality Improvement Conference

Tan Tock Seng Hospital Central Fill Pharmacy for Medication Delivery

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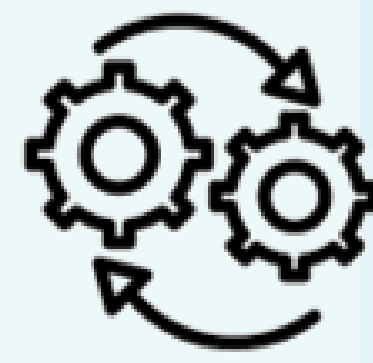
Problem Statement

Demand for Medication Delivery (MD) grew rapidly from 4% to 30% of total prescription and served as an integral part in the model of care to allow pharmacy to fulfil prescriptions beyond the hospital walls. MD **improves patients' overall experience** as medications are conveniently delivered to their doorstep.

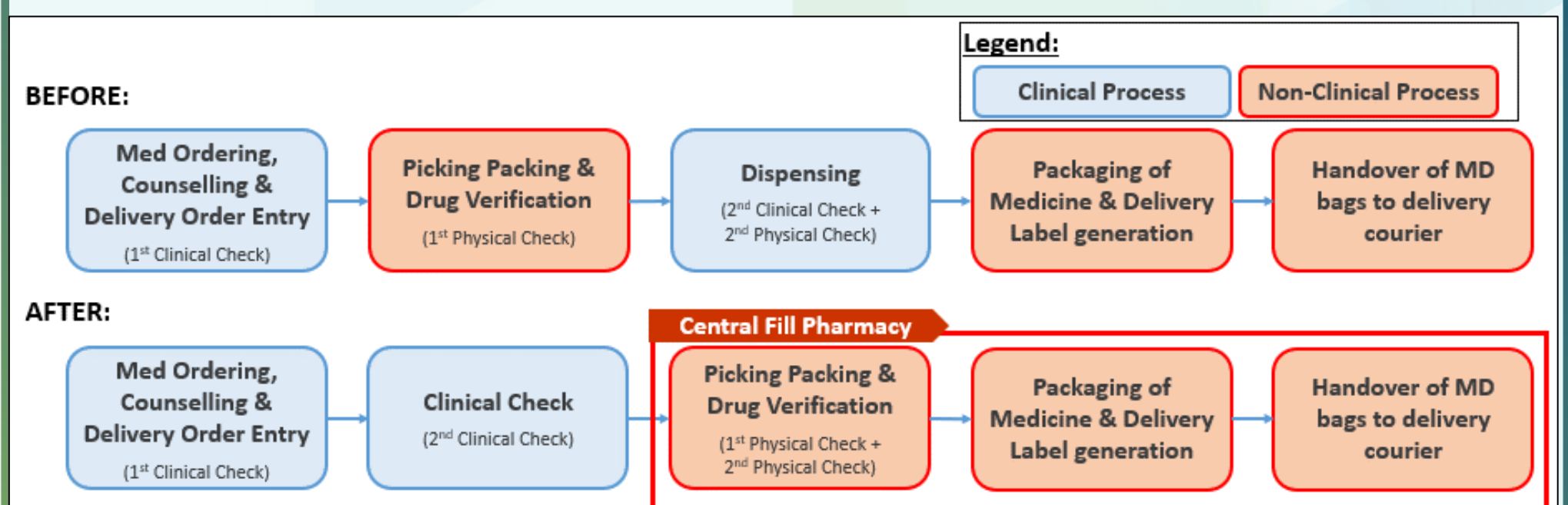
Processing a MD prescription order took 19.4% **more time** compared to onsite collection. In addition, **current infrastructure, system, space and manpower are inadequate** to meet the increased demand, leading to **space constraints** and significant amount of **overtime** impacting staff morale.

Potential Solutions

Redesign of Processes



MD processes suitable for off-site CFP were **redesigned and consolidated** to enable the change. Clinical check process was shifted to be done before transferring tasks to CFP.



Design of Dashboard & Work Tools



Dashboard and work tools were created to support **screening of eligible prescriptions** to be processed at CFP.

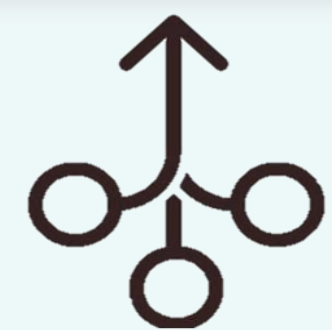
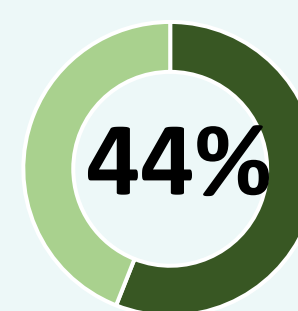
Patient Name	Rx Code	Rx Date	Rx Status	Rx Qty	Pharm Loc	Checked By	PREP BY	MD processed by	PACKING DATE	Item Code	Item Name	Qty
	0004-20-0240	2023-07-20	PREP	1					13/07/2023	0004-20-0240	Chlorzoxipron, Prop. Tab.	112
	0004-20-0240	2023-07-20	PREP	1					13/07/2023	0004-20-0240	Chlorzoxipron, Prop. Tab.	112
	0004-20-0240	2023-07-20	PREP	400					13/07/2023	0004-20-0240	PARACETAMOL, SUPPL. TAB.	400
	0004-20-0240	2023-07-20	PREP	112					13/07/2023	0004-20-0240	PARACETAMOL, SUPPL. TAB.	112
	0004-20-0240	2023-07-20	PREP	120					13/07/2023	0004-20-0240	ACETIC ACID SUPPL. TAB.	120
	0004-20-0240	2023-07-20	PREP	2					13/07/2023	0004-20-0240	CHLORZOXIPRON, SUPPL. TAB.	2
	0004-20-0240	2023-07-20	PREP	6					13/07/2023	0004-20-0240	CHLORZOXIPRON, SUPPL. TAB.	6
	0004-20-0240	2023-07-20	PREP	112					13/07/2023	0004-20-0240	PARACETAMOL, SUPPL. TAB.	112
	0004-20-0240	2023-07-20	PREP	1					13/07/2023	0004-20-0240	DELIVERY FEE \$4 (RUC)	1
	0004-20-0240	2023-07-20	PREP	1					13/07/2023	0004-20-0240	DELIVERY FEE \$4 (RUC)	1

Project Aim

To ensure **sustainability** and **business continuity**, an alternative operating model to outsource and centralize non-clinical processes was explored to right site limited resources to clinical processes, leading to the setup of TTSH Central Fill Pharmacy (CFP).

This can help manage **crowd** at the Pharmacy and **remove unnecessary waiting** onsite.

Outcomes & Impacts



- **44%** of total MD activity time was **outsourced to CFP**.
- **Overtime** was reduced by about **50 hours per day**.

Enabled **consolidation** and **streamlining** of MD processes at **7 Satellite Pharmacies** to the main pharmacy.

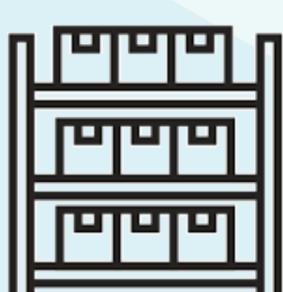
Lessons Learnt

Collaboration



Working with multiple stakeholders including outsourced partner, internal stakeholders, ALPS and delivery courier towards achieving win-win situations through changes in workflow, process and requirements.

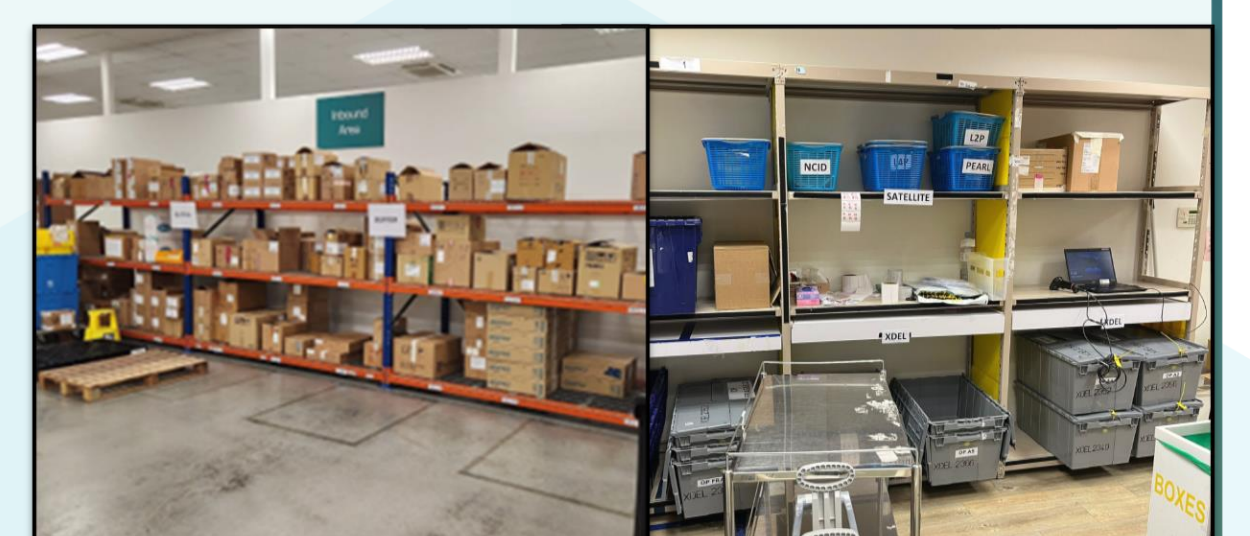
Inventory



Selection of medication to stock is crucial towards take up rate at CFP while balancing inventory holdings, preventing out of stock situations, and maintaining healthy stock movement.



Delivery turnaround time improved from **13 to 5 working days**.



Proper **infrastructure** to handle packing of MD parcels, sorting, and handover.