



# Singapore Healthcare Management 2024

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## 01 INTRODUCTION & BACKGROUND



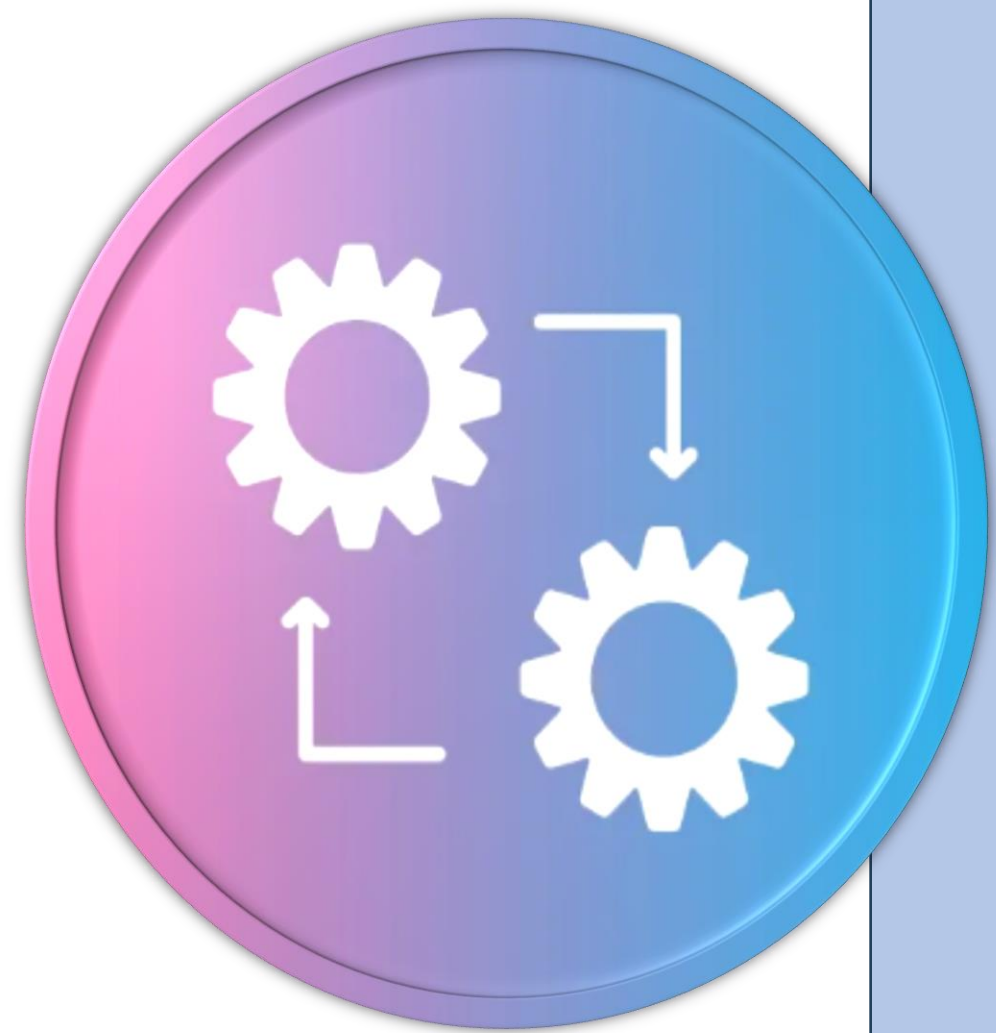
Inpatient Wards request for urgent and non-urgent medication and porters are assigned to collect medication from Unit Dose Pharmacy (UDP) to be distributed to the wards accordingly. The collection area at UDP was space constrained. Medication would be sorted and placed in 3 bins by Pharmacy technicians for distribution to all inpatient wards. Porters would be required to retrieve, sort and check medication from the bins before delivering them to the wards.

## 02 PROBLEM STATEMENT

The original medication collection pass through window at UDP was extremely compact. Retrieving medication in such close quarters gave rise to the risk of collecting incorrect medication. It was further exacerbated by the use of small bins to stack medication in. Sorting medication was tedious and required an average of 20 minutes for each batch. Since our porters are primarily senior in age, they also experienced ergonomic concerns of having to stretch past the counter window to retrieve medication.



## 03 METHODOLOGY



Identified Risk	Risk Measurement	Risk Mitigation
1. Medication dropping through the pigeonholes if medication are too light weight – result in breakage	Medium Risk	Installing <b>transparent acrylic doors</b> to each pigeonhole to prevent medication from falling through
2. Users may inadvertently still place medication in the incorrect pigeonhole.	Low Risk	Promptly <b>report individual cases</b> to the pharmacy when they occur.
3. Conducted a test on petite-sized porters to assess their ability to reach the highest pigeonhole and determine if any ergonomic issues arise.	Low Risk	Incorporated a <b>sturdy step ladder</b> to enable users to access the highest pigeonhole and <b>optimizing the pigeonhole location</b> for heavy-load wards at easily accessible height
4. Potential Risk – Users may opt to stack medications for their convenience.	Low Risk	Promptly <b>report individual cases</b> to the pharmacy when they occur.

Effective Controls mitigated potential risks

## 04 RESULTS

100% reduction of medication breakage at Pharmacy

100% reduction of wrong medication collected



## 05 CONCLUSION

Upon successful implementation, this project has:

- Enhanced patient care and safety, medications are delivered **timely & accurately**.
- Addressed porters' **ergonomic issues**.
- Joy at work**. Redesigning the workspace for porters to collect and deliver medications with ease.

Overall Time Savings  
~65.8%

Overall FTE Savings  
~\$19,118.58/year

\*From ~20mins/task to only ~8mins/task now\*  
Medications can now be delivered to patients earlier!

	Before	After	Time savings
Avg time taken to sort per mth	251.4hrs	85.8hrs	165.6hrs

