

SLH Lean Project 2023

Dr Shim Yuan Tying • Mr Matthew Hooi • Mr Derek Choo • Mr Tan Kok Hui

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#### **Project Background**

This project seeks to address a workflow for the pharmacy in discharge dispensing with the aim to optimise work processes, reduce peak flow and patient waiting time.

This evaluation is made all the more needful in light of upcoming renovation work scheduled to begin in Sep 2023. With the negative externalities resulting from renovation work, it is timely to examine and improve pharmacy workflows that will mitigate and even improve on process flow.



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# Gemba Walk to Identify Waste

SN	Description of Waste	Туре
1	Change in quantity of medication, as requested by patient/ caregiver at point of dispensing	Extra-processing
2	Change in medication/instruction on label/ quantity due to medical intervention or changes in plans by medical team	Defect
3	Patient/caregiver waiting to be "registered" upon arrival at pharmacy	Waiting
4	Patient/ caregiver waiting to receive medication/ counselling	Waiting
5	Patient/caregiver waiting to be told when to go to pharmacy for medication collection	Waiting
6	Pharmacist waiting for patients to arrive	Waiting
7	Walking into the pharmacy or to the printer to print after visit summary (medication list for reference) if not previously printed	Motion
8	Many patients waiting for available pharmacist to counsel	Inventory
9	Many other concurrent task/multi-tasking to be done by pharmacist aside from dispensing (e.g. verification of orders, answering enquiries, packing), which leads to potential errors.	Defect
10	Many steps in checking a medication basket before dispensing using different systems.	Motion

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## Value Stream Mapping: Pharmacy Discharge Dispensing



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Working Hours/day - 8.30am - 12.30pm (patients peak registration time from 10am-12pm)

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## **Root Cause Analysis**

St Lukes





## **Prioritized Counter-Measures**

Red = Not implemented

Green = Trialled and implemented

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	Root-Causes	Counter-Measures
1	Insufficient manpower - 2 pharmacists on Sat compared	CM1. Reallocate manpower (to have more pharmacists on weekends)
	to at least 4 – 5 on weekdays - Higher number of discharges	<b>CM2</b> . Stagger shifts (8.30am – 12.30pm or 9am – 1pm + 10am – 2pm)
	on Sat compared to weekdays	<b>CM3.</b> D-1 counselling during off-peak hours – separate time for counselling and dispensing
	Large number of discharges on	- Prescription must be on time
	Saturday mornings	- If meds are self-managed by patients
		- Or caregiver must be able to make it
		(note: telecounselling shall only be used as a last resort)
		CM4, hybrid bedside dispensing + counselling
		(require coordination with nursing etc)
2	Peak in load is 10am – 12pm.	<b>CM5</b> . Schedule patients for med collection Set a time to counsel correct caregiver handling meds.
		CM6. Pharmacy as first stop (to "control" traffic)
3	Patients coming to collect	
	medications at the same time	<b>CM7</b> . Include note and communicate to nurses & caregivers peak pharmacy period is 10am – 12pm, come earlier to avoid long waiting time. Introduction of flow manager role
4	Patient coming shortly before closing, and came late	at pharmacy department.
5	Caregiver/family unfamiliar with meds	<b>CM8.</b> MSW to identify the right caregiver. Admission counselling. Schedule med collection on weekdays based on EDD.
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		<b>CM9:</b> Tighten communication. Include in SOP for MSW to include main caregiver for Pharmacy's reference. (prerequisite for CM 3, 5 & 8)





## **Prioritization Matrix**



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#### **Project Results**

Discharge Dispensing Activity on Saturdays



During the pilot project, number of cases discharge dispensing done on Saturday was maintained at target of 7 On 5, 19 and 26 Aug, planned discharges were higher than 7, but D-1 dispensing successfully kept the number of discharge dispensing within target

Flow management on Saturdays has also contributed to reducing the occurrence of high traffic during peak periods. On average, 1 in 4 patients arrived at pharmacy before 10am for collection of medication since the pilot on communication of peak timing started.

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## **Project Outputs handed over to Dept**



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The outputs act as a guidance to the Pharmacy Department to sustain and maximise the expected benefits from the processes.



#### **Sustainability**





Pharmacy continues to adopt the measures and has seen **sustained reduction** in Actual Discharge Dispensing Activity against planned discharges.

This has **reduced** occurrences of high workload on Saturdays by **83%**.

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