



Improving the Wait Time for Patients Collecting 1 Item at the Singapore General Hospital Outpatient Pharmacy

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Background

The Singapore General Hospital (SGH) Outpatient Pharmacy processes more than 800 prescriptions (Rx) daily. Patients collecting 3 items or less are issued Short Queue (SQ) tickets while patients collecting more than 3 items are issued Long Queue (LQ) tickets. SQ accounts for **80%** of the total Rx workload, of which half are collecting **only 1 item**. These patients typically expect a much shorter waiting time (WT) in comparison to those with longer Rx. Patient satisfaction may be adversely affected if expectations are not met.

Analysis

Queue Series	Baseline Average Waiting Time
Short Queue (SQ) – 1 item only	29.38 minutes
Short Queue (SQ) – 2 to 3 items	30.33 minutes
Long Queue (LQ) – 4 items or more	33.26 minutes

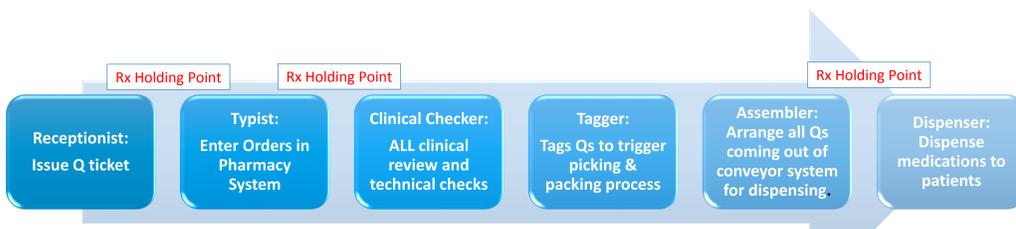


Figure 1. Workflow (at baseline, before implementation)

In general, the longest holding times were observed to be between reception to typing and between assembly and dispensing.

Hypothesis: Processing time for each step as well as the holding time between steps may be more easily reduced for Rx with 1 item, due to their greater simplicity in general, in turn reducing WT.

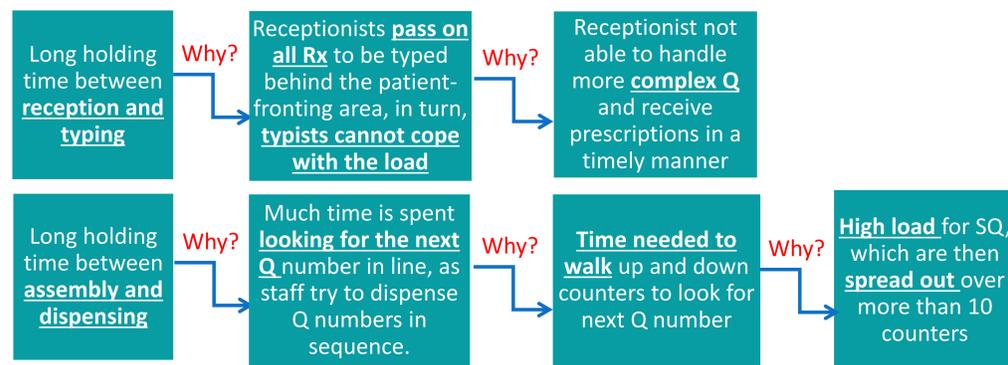


Figure 2. Root cause analysis for long waiting time, using the 5-Whys method

Interventions / Initiatives

New Q series is introduced, for streamlining of workflow: the **1-item Q series**, for collection of only 1 item in an Rx.

Q Series	Before	After
	Criteria (Number of Items in Rx)	
1-item Q	N/A	1
SQ	1-3	2-4
LQ	4 or more	5 or more

Reduction in touch points from 3 (reception, typist, clinical checker) to just 2, reducing the potential for holding time. Receptionists and clinical checkers share the typing load.



Figure 3. New workflow for 1-item Q

Reduction in time needed to look for next Q in sequence, hence reducing holding time.

Mission Statement

To reduce the **average wait time** for patients collecting **1 item** by **25%** within 3 months.

Results

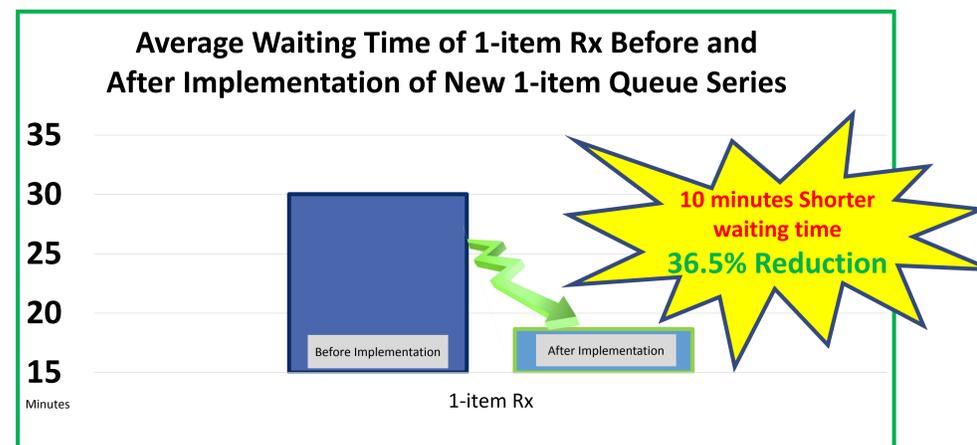


Figure 4. Average Waiting Time for prescriptions with 1 item before and after implementation

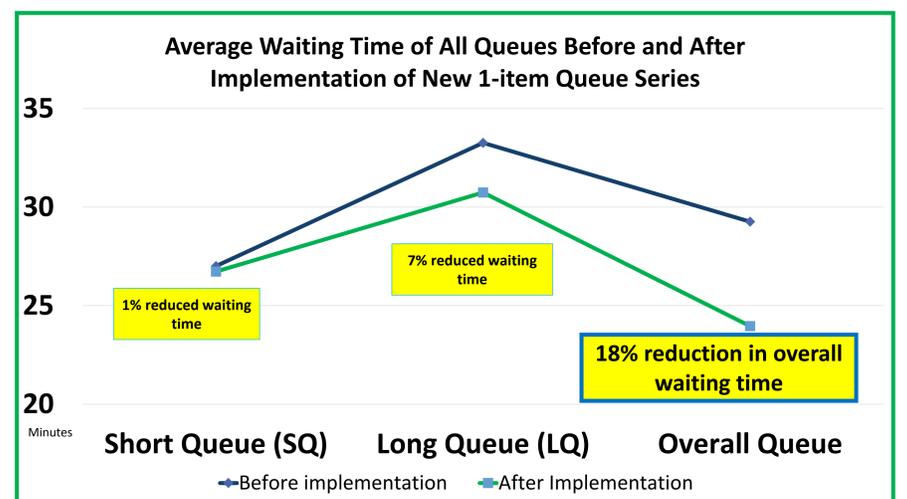


Figure 5. Average Waiting Time for **all other** prescriptions before and after implementation

Benefits of 1-item Q Series

- Strategically target 30-40% of prescription workload with potential to be served faster compared to original workflow
- Reduces overall waiting crowd at pharmacy, with spillover benefits even on other Q series
- Improves overall patient experience and hence satisfaction.
- Greater staff satisfaction because of integrated workflow and well-defined priorities to follow.

Conclusion & Sustainability Plans

The workflow has been successfully integrated into daily operations and is therefore **fully sustainable**. In view of the positive results at the main pharmacy, the Bowyer Block Pharmacy has also adapted the initiative to introduce a 1-item Q series in their system, to streamline work processes and achieve better patient waiting times.

Acknowledgments

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