



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 |

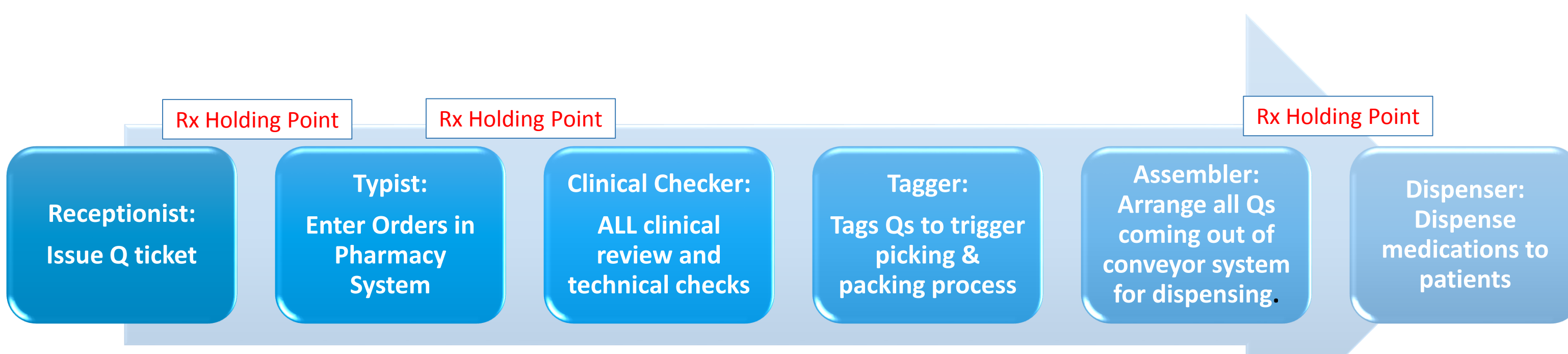


Figure 1. Workflow (at baseline, before implementation)

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.

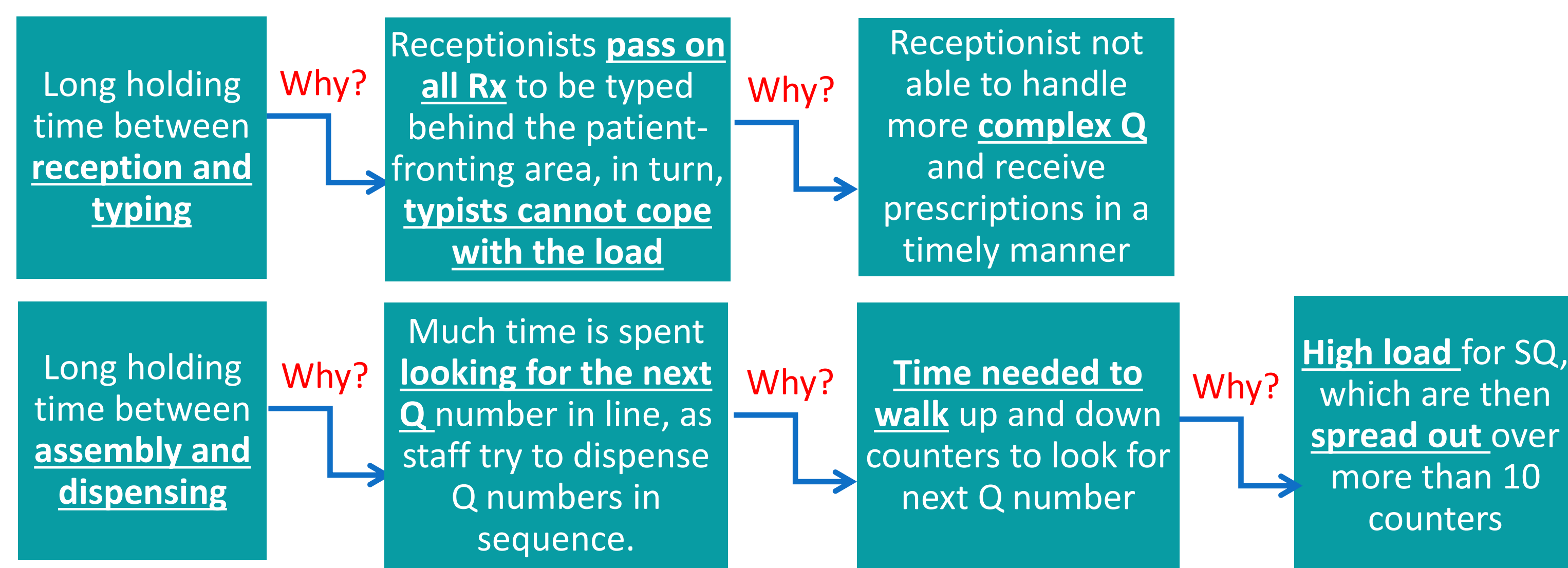


Figure 2. Root cause analysis for long waiting time, using the 5-Whys method

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.

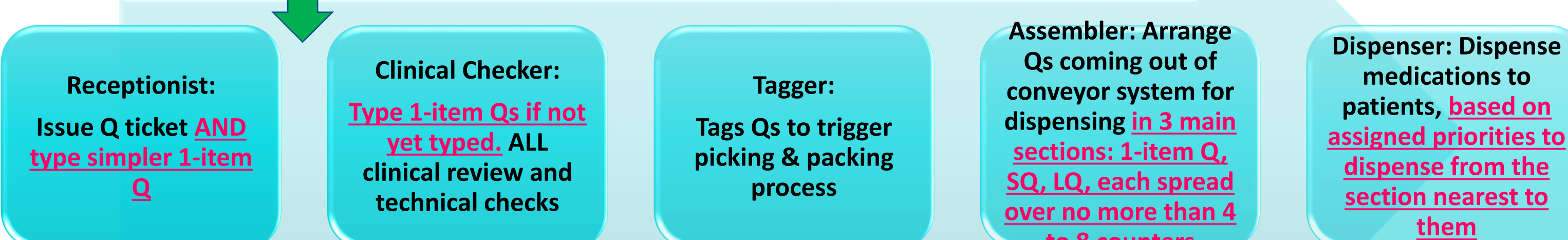


Figure 3. New workflow for 1-item Q

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

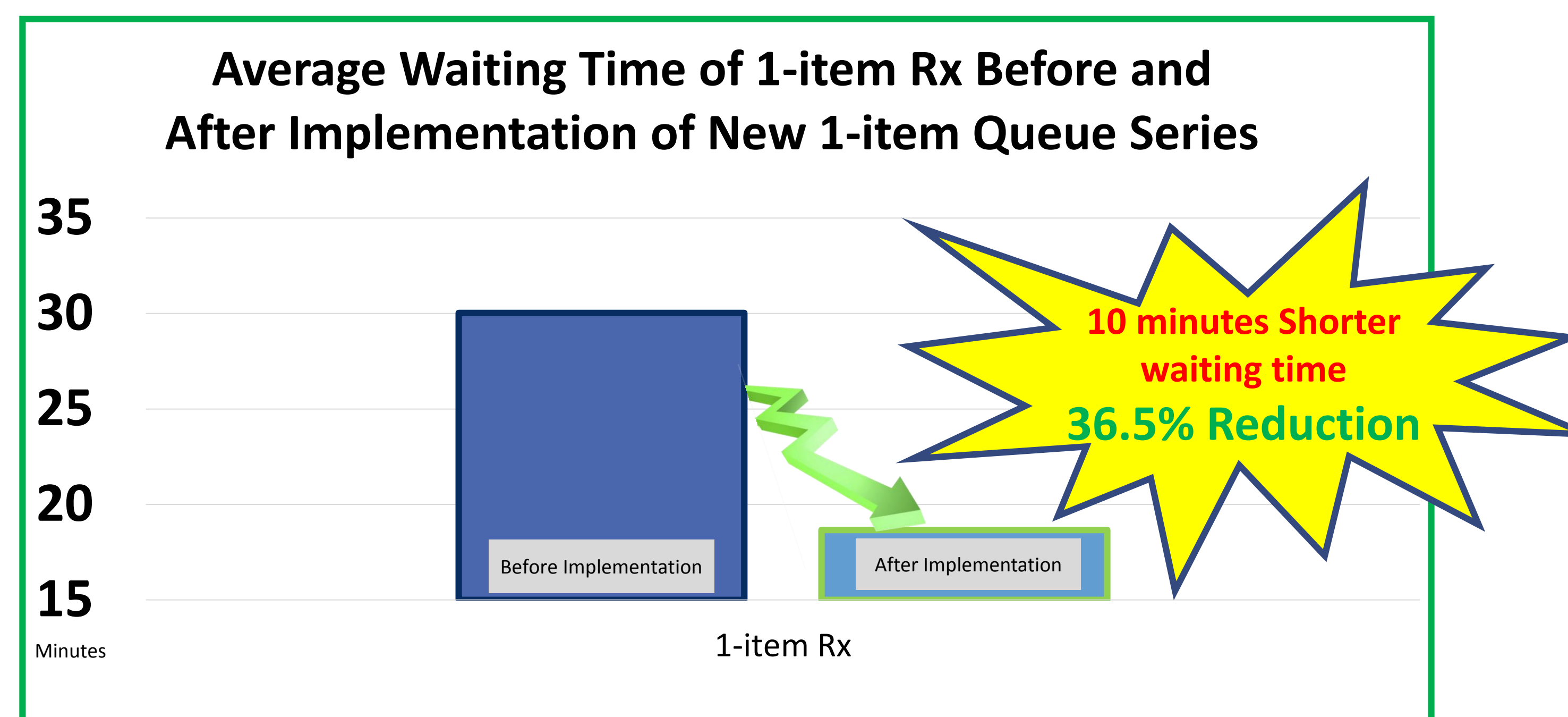


Figure 4. Average Waiting Time for prescriptions with 1 item before and after implementation

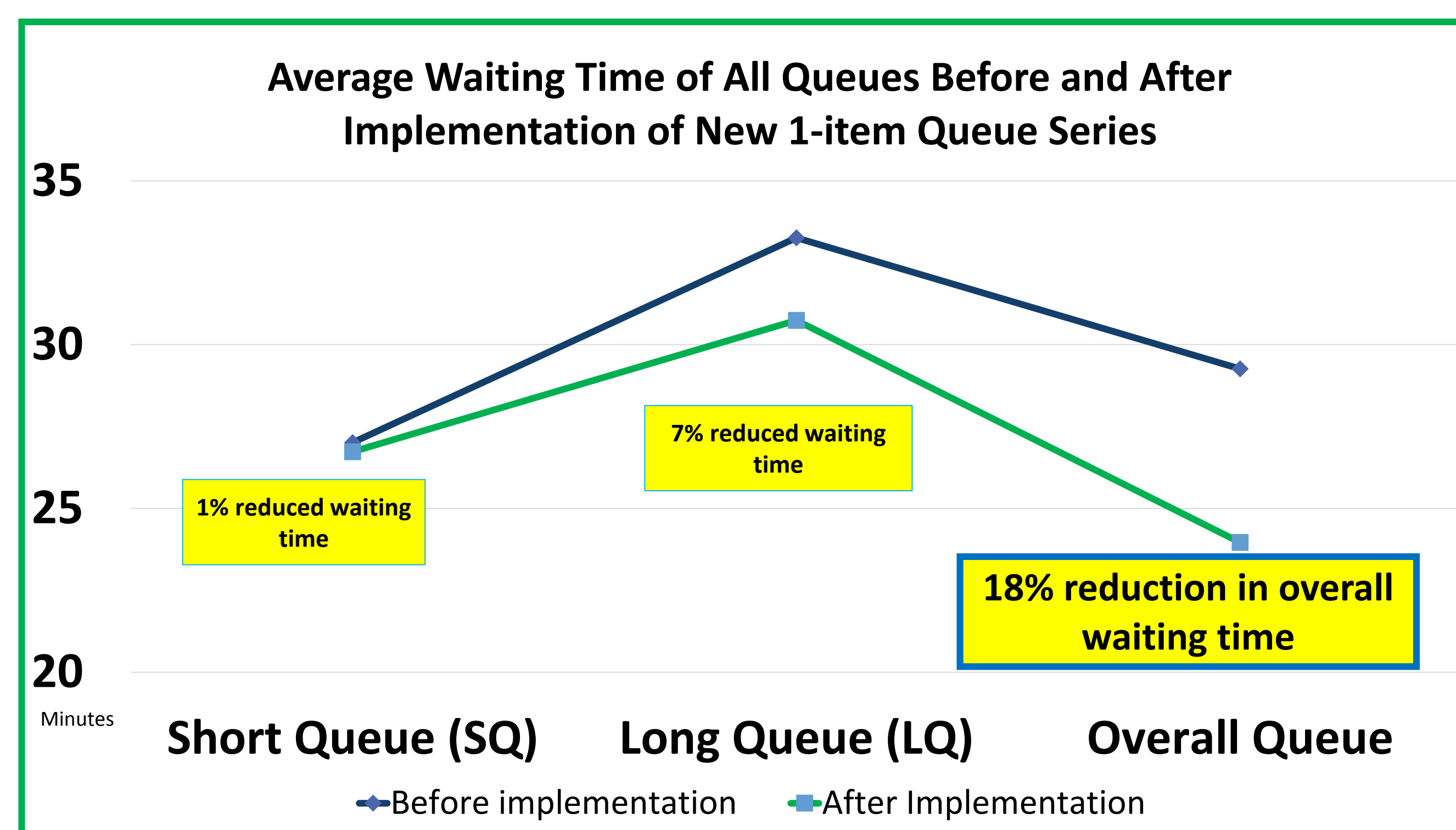


Figure 5. Average Waiting Time for **all other** prescriptions before and after implementation

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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