

# New Territories West Cluster



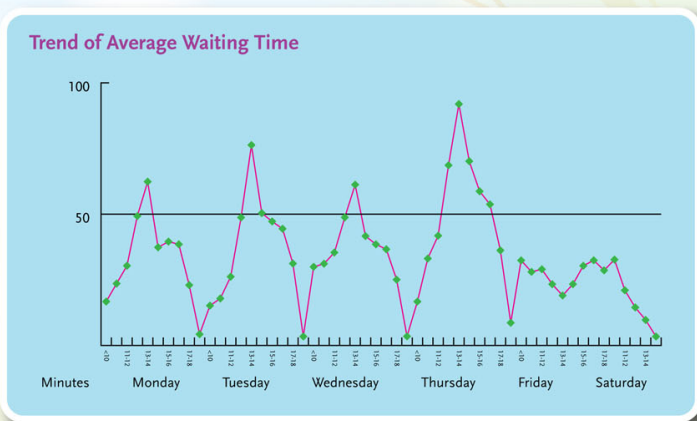
## Reduction of Tuen Mun Ambulatory Care Centre (ACC) pharmacy waiting time for drug collection

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### BACKGROUND

The ACC Pharmacy drug collection waiting time during rush hour was much higher than the average waiting time, and could be up to 90 minutes during the lunch hour. Many patients were not satisfied with the long waiting time.



### OBJECTIVE

The primary aim of the kaizen (improvement) project is to reduce the ACC Pharmacy waiting time for drug collection.

### ROOT CAUSE ANALYSIS

#### I. Waste of pharmacy staffs excessive walking:

Before issuing to patients, all the drug baskets were placed in a large bench 5 meters away from the drug issuing counters. The pharmacy staffs needed to leave the counters and search the drug baskets from the bench when issuing drugs. The daily excessive walking was 3000 meters.

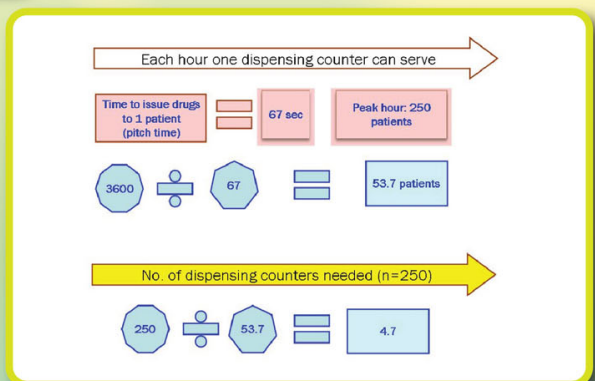
#### II. Inadequate drug issuing counters during rush hour:

The pitch time for drug issuing and counseling step was 67 seconds. During rush hour when the hourly patient load was 250, 4.7 drug issuing counters were needed. However, in reality there were only 2 to 3 counters opened leading to accumulation of work-in-process (WIP).



### INTERVENTIONS

- I. Instead of single queue, there were multiple patient queues for drug collection. All the drug baskets were put in small trolleys; each trolley contained 8 to 10 drug baskets. The trolleys were placed just next to the drug issuing counters. The pharmacy staffs did not need to leave the counters to find the baskets. Excessive walking was eliminated.
- II. During the rush hour, the number of drug issuing counters was increased (at least 4 counters). The actual number of counters was adjusted according to the hourly workload.



### RESULTS

Three multi-queue trial runs were conducted.

Trial run	28 Aug 09 (Fri)	9 Oct 09 (Fri)	24 Nov 09 (Tue)	Average
Drug issuing time (sec)*	26.2 vs. 67 (↓61%)	20.4 vs. 67 (↓69.5%)	61.3 vs. 67 (↓8.5%)	↓46.3%
Waiting time change (min)*	23.7 vs. 28 (↓15.4%)	24.8 vs. 27.8 (↓10.8%)	35.3 vs. 45.3 (↓22%)	↓16%

\* Trial data was compared with a day with similar prescription no. and man power

### CONCLUSION

The objective of the project could be achieved without additional capital investment. The improvements were:

- decrease pharmacy average waiting time by 16%;
- increase patients' satisfaction;
- decrease daily pharmacy staffs excessive walking by 3000 meters;
- decrease drug issuing time by 46.3%.